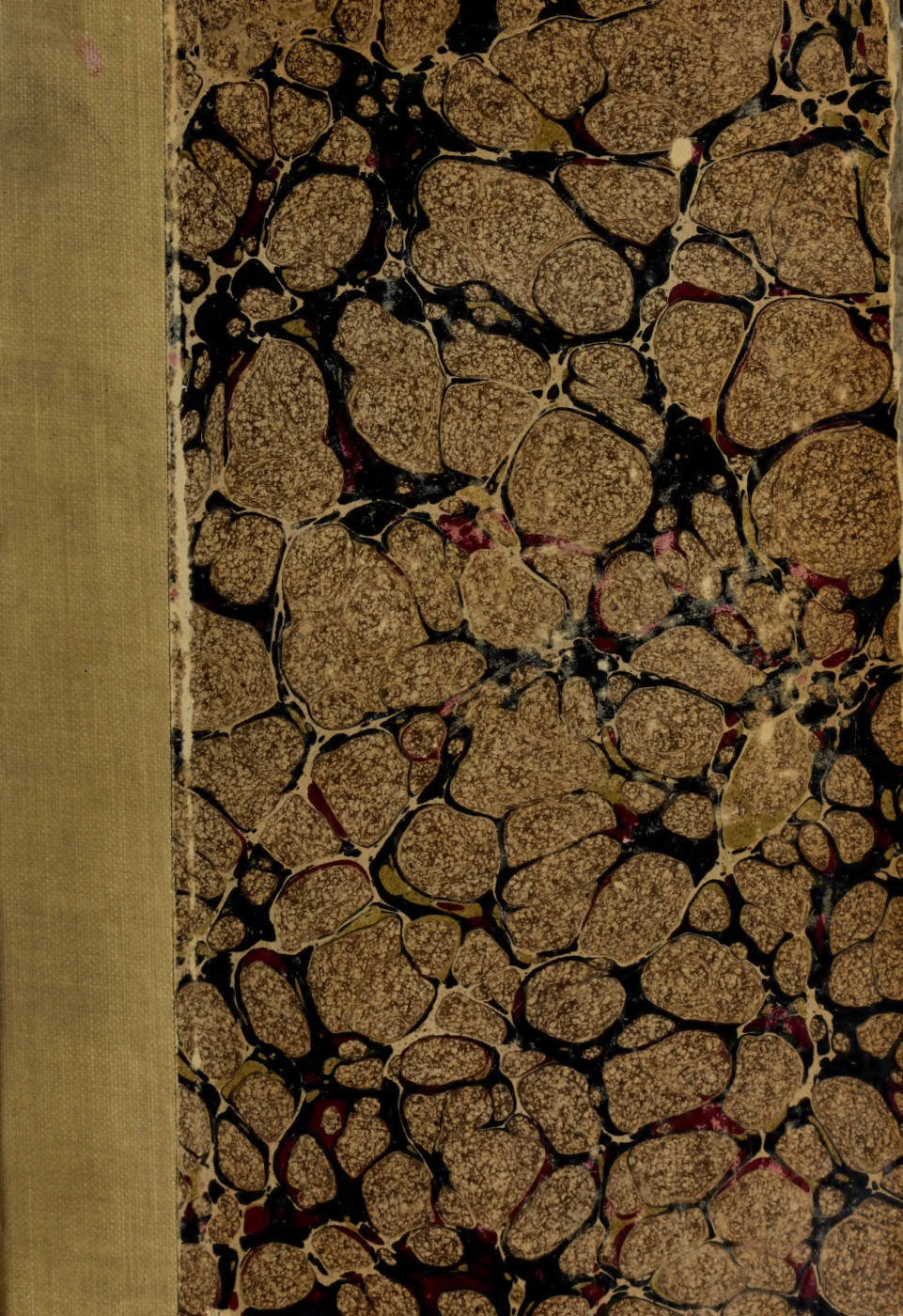


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CORNELL UNIVERSITY MEDICAL COLLEGE

Announcement

1898-1899

NEW YORK CITY
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1898

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SPECIAL NOTICE.

THE creation of a Medical Department of Cornell University, which had long been contemplated by the Trustees, was determined by the gift to the University for that purpose of funds ample for the construction of the necessary plant and the support of the department. In addition, the University was able to secure a faculty composed of men who have been associated for many years in carrying on the Medical Department of another university, and join with them a number of other physicans and surgeons connected with important hospitals; so that the college begins with an equipment of experience and clinical facilities that is unsurpassed. Upon this basis of men and material, the University confidently expects to create a department that will take equal rank with any. The buildings that have been obtained for temporary use during the construction of our own have long been in use for the same purpose; they are conveniently situated and offer ample facilities (see page 42). The number of students who have applied for admission to the different years of the course is sufficient to insure a full set of classes at the outset, so that not only will the organization be complete, but the work will be carried on in all its details, and students who enter the advanced classes will have all the opportunities and facilites of a long organized and active school. Advantage has been taken of the opportunity to make some important and long desired changes in the method of instruction, notably in the increase of bedside teaching, which are given in detail elsewhere (see page 33).

The full four-year course of the Cornell University Medical College is given in the city of New York; and the course of the first two years is also given in Ithaca. Men students may take half the course in Ithaca and the other half in New York, or the entire course in New York; women students must take the first half of the course in Ithaca (where a home is provided in the Sage College for Women) and the last half in New York.

STAFF OF INSTRUCTION.

THE FACULTY.

JACOB GOULD SCHURMAN, A.M., D.Sc., LL.D.,
President. Ithaca, New York.

WILLIAM M. POLK, M.D., LL.D.,
Dean and Professor of Gynæcology and Obstetrics, Gynæcologist to Bellevue Hospital and Obstetrician to Emergency Lying-in Hospital.

LEWIS A. STIMSON, M.D.,
Professor of Surgery, Surgeon to Bellevue and New York Hospitals.

RUDOLPH A. WITTHAUS, M.D.,
Professor of Chemistry, Physics, and Toxicology.

W. GILMAN THOMPSON, M.D.,
Professor of Medicine, Physician to the Presbyterian and Bellevue Hospitals.

GEORGE WOOLSEY, M.D.,
Professor of Anatomy and Clinical Surgery, Surgeon to Bellevue Hospital.

HENRY P. LOOMIS, M.D.,
Professor of Materia Medica, Therapeutics, and Clinical Medicine, Visiting Physician to the New York and Bellevue Hospitals.

J. CLIFTON EDGAR, M.D.,
Professor of Obstetrics and Clinical Midwifery, Visiting Physician to the Society of the Lying-in Hospital and to the Maternity Hospital.

AUSTIN FLINT, M.D.,
Professor of Physiology.

FREDERIC S. DENNIS, M.D.,
Professor of Clinical Surgery, Surgeon to Bellevue Hospital.

FREDERICK W. GWYER, M.D.,
Professor of Operative and Clinical Surgery, Visiting Surgeon to Bellevue Hospital.

IRVING S. HAYNES, M.D.,
Professor of Practical Anatomy, Surgeon to the Harlem Hospital.

JOSEPH E. WINTERS, M.D.,
Professor of Diseases of Children, Visiting Physician to Willard Parker Hospital.

CHARLES STEDMAN BULL, A.M., M.D.,
Professor of Ophthalmology, Visiting Surgeon to New York Eye and Ear Infirmary.

NEWTON M. SHAFFER, M.D.,
Professor of Orthopædic Surgery, Surgeon in Chief to New York Orthopædic Dispensary and Hospital.

GORHAM BACON, M.D.,
Professor of Otology, Aural Surgeon to New York Eye and Ear Infirmary.

CHARLES L. DANA, M.D.,
Professor of Diseases of the Nervous System, Physician to Bellevue Hospital, Neurologist to the Montefiore Home.

SAMUEL ALEXANDER, M.D.,
Professor of Diseases of the Genito-Urinary System, Surgeon to Bellevue Hospital.

GEORGE THOMAS ELLIOT, M.D.,
Professor of Dermatology, Assistant Physician to the Skin and Cancer Hospital.

ALLAN MCLANE HAMILTON, M.D.,
Professor of Mental Diseases, Consulting Physician Manhattan State Hospital [for the Insane].

CHARLES H. KNIGHT, M.D.,
Professor of Laryngology, Surgeon to the Manhattan Eye and Ear Hospital, Throat Department.

ALEXANDER LAMBERT, M.D.,
Professor of Clinical Medicine, Instructor in Physical Diagnosis, Visiting Physician to Bellevue Hospital.

FRANCIS W. MURRAY, M.D.,
Professor of Clinical Surgery, Visiting Surgeon to St. Luke's and New York Hospitals.

CHARLES E. NAMMACK, M.D.,
Professor of Clinical Medicine, Visiting Physician to Bellevue Hospital.

FRED. KAMMERER, M.D.,
Professor of Clinical Surgery, Surgeon to German and St. Francis Hospitals.

IVIN SICKELS, M.D.,
Assistant Professor of Chemistry and Physics.

INSTRUCTORS.

CHARLES C. BARROWS, M.D.,
Instructor in Clinical Gynæcology, Assistant Gynæcologist, Bellevue Hospital.

PERCIVAL R. BOLTON, M.D.,
Instructor in Surgery, Assistant Surgeon, Bellevue Hospital.

BERTRAM H. BUXTON, M.D.,
Instructor in Bacteriology.

DEVER S. BYARD, M.D.,
Instructor in Medicine.

CHARLES N. BANCKER CAMAC, M.D.,
Instructor in Clinical Microscopy.

WARREN COLEMAN, M.D.,
Instructor in Clinical Medicine and in Materia Medica, Visiting Physician to City Hospital.

LEWIS A. CONNER, M.D.,
Instructor in Medicine, Assistant Pathologist to the New York Hospital.

FRANK S. FIELDER, M.D.,
Assistant Demonstrator of Anatomy.

JOSEPH FRAENKEL, M.D.,
Instructor in Diseases of the Nervous System.

WILLIAM TRAVIS GIBB, M.D.,
Instructor in Clinical Gynæcology.

GEORGE D. HAMLEN, M.D.,
Instructor in Gynæcology and Obstetrics.

JOHN A. HARTWELL, M.D.,
Instructor in Physiology.

EDWARD L. KEYES, JR., M.D.,
Assistant Demonstrator of Anatomy.

J. E. NEWCOMB, M.D.,
Instructor in Laryngology.

LOUIS W. RIGGS, PH.D.,
Instructor in Chemistry and Physics.

JOHN ROGERS, JR., M.D.,
Instructor in Surgery, Assistant Demonstrator of Anatomy.

EDMUND PENDLETON SHELBY, M.D.,
Instructor in Materia Medica Laboratory.

WILLIAM F. STONE, M.D.,
Instructor in Anatomy, Assistant Demonstrator of Anatomy.

GEORGE K. SWINBURNE, M.D.,
Instructor in Diseases of the Genito-Urinary System.

BENJAMIN T. TILTON, M.D.,
Instructor in Surgery.

GEORGE GRAY WARD, JR., M.D.,
Instructor in Obstetrics.

CLINICAL ASSISTANTS.

ROBERT STAUNTON ADAMS,
Clinical Assistant in Diseases of Children, Attending Physician to Children's Class, Demilt Dispensary.

RUSSELL BELLAMY, M.D.,
Clinical Assistant in Medicine.

W. BEDFORD BROWN, M.D.,
Clinical Assistant in Dermatology.

JOHN CABOT, M.D.,
Clinical Assistant in Diseases of the Genito-Urinary System.

EARLE CONNOR, M.D.,
Clinical Assistant in Otology.

WILLIS S. COOKE, M.D.,
Clinical Assistant in Diseases of Children.

COLEMAN WARD CUTLER, M.D.,
Clinical Assistant in Ophthalmology, Assistant Surgeon to the New York Eye Infirmary, Attending Ophthalmic Surgeon to St. Luke's Hospital.

ROBERT M. DALEY, M.D.,
Clinical Assistant in Diseases of the Nervous System.

JOHN M. ECHEVERRIA, M.D.,
Clinical Assistant in Diseases of the Genito-Urinary System.

P. HENRY FITZHUGH, M.D.,
Clinical Assistant in Orthopædics, Assistant Surgeon New York Orthopædic Dispensary and Hospital, Assistant Surgeon Daisy Field Hospital.

ARCHIBALD E. ISAACS, M.D.,
Clinical Assistant in Surgery.

CATESBY C. JONES, M.D.,
Clinical Assistant in Otology, Clinical Assistant New York Eye and Ear Infirmary.

J. A. KENEFICK, M.D.,
Clinical Assistant in Laryngology.

THURSTON G. LUSK, M.D.,
Clinical Assistant in Dermatology, Dermatologist to the Outdoor Department of Roosevelt Hospital.

ROBERT G. REESE, M.D.,
Clinical Assistant in Ophthalmology, Assistant Surgeon to the New York Eye Infirmary.

GEORGE DE FOREST SMITH, M.D.,
Clinical Assistant in Mental Diseases.

WILLIAM F. STONE. M.D.,
Clinical Assistant in Surgery.

HENRY H. WHITEHOUSE, M.D.,
Clinical Assistant in Dermatology, Assistant Surgeon to the New York Skin and Cancer Hospital, Dermatologist to Demilt Dispensary.

NOTE.—Appointments in the Department of Pathology to be announced.

STAFF OF INSTRUCTION AT ITHACA.

GEORGE CHAPMAN CALDWELL, B.S., Ph.D.,
Professor of Chemistry.

BURT GREEN WILDER, B.S., M.D.,
Professor of Physiology.

EDWARD LEAMINGTON NICHOLS, B.S., Ph.D.,
Professor of Physics.

SIMON HENRY GAGE, B.S.,
Professor of Microscopy, Histology, and Embryology.

VERANUS ALVA MOORE, B.S., M.D.,
Professor of Pathology and Bacteriology.

WILLIAM RIDGELY ORNDORFF, A.B., Ph.D.,
Assistant Professor of Organic Chemistry.

JOSEPH ELLIS TREVOR, Ph.D.,
Assistant Professor of Chemistry.

PIERRE AUGUSTINE FISH, B.S., D.Sc., D.V.S.,
Assistant Professor of Physiology and Materia Medica.

LUZERNE COVILLE, B.S., M.D.,
Lecturer and Demonstrator in Anatomy.

EMILE MONNIN CHAMOT, B.S., Ph.D.,
Lecturer in Toxicology.

FREDERIC LAWRENCE KORTRIGHT, D.Sc.,
Instructor in Chemistry.

Note.—Other names will be announced hereafter.

Clerk of the College, J. THORN WILLSON,
414 East 26th Street.

ADMISSION AND CLASSIFICATION OF STUDENTS.

REQUIREMENTS FOR ADMISSION.

For admission to the Cornell University Medical College students must furnish satisfactory evidence of good moral character, and must conform to the rules and regulations of the New York State Board of Regents. No entrance examination other than that of the Regents is required.

While it is not necessary, it is highly advantageous that students entering upon the study of medicine should have had a college or university training in the liberal arts and sciences; and for the benefit of such it has been arranged that students in the Academic Department of Cornell University may elect in the Medical College certain studies, thereby materially shortening the time required for taking both the A.B. and M.D. degrees.

REGENTS' ENTRANCE EXAMINATIONS AND CERTIFICATES.

The following requirements for admission to candidacy for a degree in *any medical college in New York State* were established by laws passed by the Legislature, to take effect March 21, 1896.

MEDICAL STUDENTS' CERTIFICATES.

Each student who matriculates with the intention of becoming a candidate for the degree of doctor in medicine, whether he comes to New York to begin or continue the study of medicine, must file with the dean of the College a medical-student's certificate issued by the Regents of the University of the State of New York.

This certificate is granted according to the following extract of the Laws of 1896, ch. 3:

To provide for the preliminary education of medical students:

The degree of bachelor or doctor of medicine shall not be conferred in this State before the candidate has filed with the institution conferring it the certificate of the Regents that before beginning the first annual medical course counted toward the degree (unless matriculated condi-

tionally as hereinafter specified), he had either graduated from a registered college or satisfactorily completed a full course in a registered academy or high school; or had a preliminary education considered and accepted by the Regents as fully equivalent; or held a Regents' medical-student certificate, granted before this act took effect; or had passed Regents' examinations as hereinafter provided. A medical school may matriculate conditionally a student deficient in not more than one year's academic work or twelve counts of the preliminary education requirement, provided the name and deficiency of each student so matriculated be filed at the Regents' office within three months after matriculation, and that the deficiency be made up before the student begins the second annual medical course counted toward the degree. Students who had matriculated in a New York medical school before June 5, 1890, and students who had matriculated in a New York medical school before May 13, 1895, as having entered before June 5, 1890, on the prescribed three-years' study of medicine, shall be exempt from this preliminary education requirement.

A medical student certificate may be earned without notice to the Regents of the conditional matriculation either before the student begins the second annual medical course counted toward the degree or two years before the date of the degree for matriculants in any registered medical school, in the four cases following:

1. For matriculants prior to May 9, 1893, for any twenty counts, allowing ten for the preliminaries, not including reading and writing.

2. For matriculants prior to May 13, 1895, for arithmetic, elementary English, geography, spelling, United States history, English composition, and physics, or any fifty counts, allowing fourteen for the preliminaries.

3. For matriculants prior to January 1, 1896, for any twelve academic counts.

4. For matriculants prior to January 1, 1897, for any twenty-four academic counts.

But all matriculants, after January 1, 1897, must secure forty-eight academic counts, or their full equivalent, before beginning the first annual medical course counted toward the degree, unless admitted conditionally, as hereinbefore specified, when the deficiency must be made up before the student begins the second annual medical course counted toward the degree.

(This act shall take effect March 21st, 1896, except that the increase in the required course of medical study from three to four years shall take effect January 1, 1898, and shall not apply to students who matriculated before that date and who received the degree of doctor of medicine before January 1, 1902.)

CERTIFICATES WITHOUT EXAMINATIONS.

Students are advised to communicate with the Regents of the University, Albany, N. Y., and procure certificates before entering the college; or they may present or forward their credentials to the secretary

of the college, who will promptly send them to the Regents for examination and approval. They will be returned as soon as verified, and, if accepted, the proper certificate will be sent with them. The secretary of the college will furnish, on application, blank forms of collegiate, academic, or high-school certificates to be filled out and sent to the Regents. Other equivalent credentials from foreign countries or from other States may be accepted by the Regents at their discretion.

NOTES ON THE LAW.

1. For matriculates prior to January 1, 1897, medical schools are not required to furnish notice of conditional matriculation, and such students may make up the full requirement at any time before beginning the second annual course counted toward the degree, or two years before the date of the degree.

All matriculants after January 1, 1897, must secure forty-eight academic counts or their full equivalent before beginning the first annual course counted toward the degree, unless admitted conditionally, in which case the deficiency is not to exceed twelve academic counts and must be made up before the student begins the second annual course counted toward the degree.

2. The Regents will accept as fully equivalent to the required academic course any one of the following :

(*a*) A certificate of having successfully completed at least one full year's course of study in the collegiate department of any college or university, registered by the Regents as maintaining a satisfactory standard.

(*b*) A certificate of having passed in a registered institution examinations equivalent to the full collegiate course of the freshman year or to a completed academic course.

(*c*) Regents' pass card for any forty-eight academic counts or any Regents' diploma.

(*d*) A certificate of graduation from any registered gymnasium in Germany, Austria, or Russia.

(*e*) A certificate of successful completion of a course of five years in a registered Italian *ginnasio* and three years in a *liceo*.

(*f*) The bachelor's degree in arts or science, or substantial equivalents from any registered institution in France or Spain.

(*g*) Any credential from a registered institution or from the government in any foreign state or country which represents the completion of a course of study equivalent to graduation from a registered New York high school or academy or from a registered Prussian gymnasium.

3. Other equivalent credentials from other States and countries besides those specified in the law, which may be accepted by the Regents in place of an examination, may be ascertained by written application to Examination Department, University of the State of New York, Albany, N. Y.

4. Any student who has matriculated under the legal requirements in regard to Regents' examinations, existing at the time of matriculation, will not require another certificate whenever he may be graduated.

5. If students unable to offer equivalents come from out of the State, they may enter the second course counted toward the degree, provided that at the preceding June or September examination they meet the preliminary requirement.

Medical students' certificates issued on "equivalents" without examination, may be obtained at any time before the degree of M.D. is conferred, provided that the course of study for which the certificate is issued was completed within the prescribed time.

EXAMINATIONS UNDER THE ACT.

Students who do not obtain a medical-student's certificate without examination must pass an examination on the subjects required by the Regents. These examinations are held entirely under the charge of the Regents in New York, and in many other places throughout the State, on the following dates:

CALENDAR OF REGENTS' EXAMINATIONS.

YEAR	JAN.	MAR.	JUNE	SEPT.
1898			13–17	27–29
1899	23–27	29–31	12–16	26–28
1900	22–26		11–15	25–27

NOTE.—September examinations will be held in New York, Albany, Syracuse, and Buffalo, for law and medical students only. The other examinations are held in New York and in numerous academies and high schools throughout the State for professional and academic students.

APPLICATION FOR ADMISSION TO MEDICAL SCHOOLS.

The minimum requirement for a medical-student certificate is four years of satisfactory high-school work or its equivalent (for matriculates after January, 1897).

For admission to the study of certain professions, New York laws require the completion of satisfactory work in a registered high school or its equivalent. Candidates for certificates, either without examination or by partial examinations, should submit this application to the Examination Department, University State of New York, Albany, N. Y., which will send either the proper certificate or a statement of credit given for all work done and of farther requirements.

BASIS OF REGISTRATION.

Admission to a high school presupposes at least eight years of common school or pre-academic work. The minimum requirement for each high-school year is three academic subjects taken five times a week throughout the year. The Regents count forty weeks as a full academic year;

but if the candidate has passed successfully in a registered institution all the examinations for a full year's work, the question of actual attendance is not raised. Institutions throughout the world are registered if they offer academic work equivalent to one or more years in a registered high school.

NOTES.

Partial equivalents may be accepted for medical-student certificates—*i.e.*, evidence of completion in a registered school of one or more full years of high-school work and Regents' examinations in additional subjects representing the balance of the required academic course.

Regents' examinations in the second or third year of any language course will be accepted as including the preceding years in those courses.

Candidates unable to offer certificates of the required academic work in a registered institution may present evidence to the Regents that they had the required preliminary education, and may on passing Regents' examinations receive their certificates as of the date when the preliminary work was completed.

Printed question papers will be issued from the Regents' office for each examination. Answers must be written on both sides of letter paper, and arranged and numbered in the same order as the questions.

Seventy-five per cent of correct answers is required in all subjects.

Answer papers will be reviewed in the Regents' office, and all papers below standard will be returned to the candidates. For those accepted, pass cards will be issued.

Pass Cards.—A Regents' pass card is not limited in time ; therefore it is not necessary to pass any Regents' examination a second time.

To insure success, candidates should have a thorough knowledge of the whole of a standard school text-book on each required subject, including the metric system, but not cube root in elementary arithmetic.

Medical-Student Certificate.—When all requirements are fulfilled, the Regents grant a medical-student certificate.

On receiving this certificate, the candidate must send it to the secretary or recording officer of the university or college at which he intends to study medicine.

N. B.—*Candidates for medical-student examinations should send notice at least ten days in advance, stating at what time and in what studies they wish to be examined*, that required desk room may be provided at the most convenient place.

Candidates who fail to send this advance notice will be admitted only so far as there are unoccupied seats.

DIRECTIONS FOR OBTAINING A REGENTS' MEDICAL-STUDENT CERTIFICATE.

1. Give the full name of the applicant, the exact name of the institution and of the department attended, an accurate description of the course pursued, using the same terms that are given in the official announcement, circular, or catalogue of the institution.

2. Send an official announcement, circular, or catalogue of the institution, showing:

(*a*) Requirements for admission, *i.e.*, subjects and years given to their completion.

(*b*) Requirements for graduation in each course, including subjects pursued and time devoted to each.

MELVIL DEWEY, *Secretary.*
JAMES RUSSELL PARSONS, JR.,
Director of Examinations.

Regents' Office, Albany, N. Y.,
15 *April*, 1898.

REGISTRATION AND MATRICULATION.

Students on entering the College will be required to register and pay the registration fee of $5. They will receive a receipt for this fee, which will be exchanged for a certificate of full or conditional matriculation when they shall have complied with the Regents' requirements for such matriculation; but students who have already been matriculated at a medical college in the State of New York, according to the Regents' requirements, and those who already hold medical-student certificates, will be matriculated immediately on registration.

(1) ADMISSION TO ADVANCED STANDING IN THE FIRST YEAR.

Graduates of Cornell, Yale, Harvard, Princeton, University of Pennsylvania, Johns Hopkins, Columbia, University of Michigan, and other accredited universities, who have taken either a preparatory medical course or special work in organic and inorganic chemistry, physics, or physiology, will be allowed credit for the work which they have done and may be excused from the recitations upon these subjects, and from the exercises of the chemical laboratory in the first year, provided they pass examinations before the professors of these departments, and provided they give to dissection and advanced laboratory work, in various departments, a full equivalent in hours to the subjects they may have passed by examination. These examinations are held at the opening of the session.

Students who have had training in microscopical technique or in histology will be given advanced work in the histological laboratory.

Students who have already attended courses in other medical colleges may be admitted to advanced standing in the four-years' course of the Cornell University Medical College under the following conditions:

(2) Admission to the Second Year.

Students from other accredited medical colleges desiring to enter the second year of the course must present certificates of attendance in laboratory courses of histology, chemistry, and materia medica corresponding in extent with those described on pages 27 to 31, or they must pass examinations in these branches. They must also show certificates of one year's work in dissection. There will be no other entrance examinations.

(3) Admission to the Third Year.

Students coming from other accredited medical colleges desiring to enter the third year must pass final examinations in the subjects of anatomy, physiology, chemistry and physics, and materia medica, and must present satisfactory certificates of laboratory instruction in histology, and chemistry, and pathology, and in dissection. In lieu of a certificate of attendance on any laboratory course included in the curriculum of this College, students will be obliged to take the course during their third year.

(*a*) *Admission to the Class Graduating in 1899.*

Those admitted after two full courses in other accredited medical colleges may enter the class graduating in 1899 if they so elect. After the session of 1898–99 four full years of study will be required.

(4) Admission to the Fourth Year.

Students coming from other accredited medical colleges, in which they have already passed three years of study, will be admitted to the fourth year, upon passing examinations in those subjects the study of which has been com-

pleted during the first three years of the course as specified in the curriculum on pages 38 to 41.

(5) Students from Other Colleges.

Graduates of pharmacy or of dental or veterinary or other professional schools, who can present satisfactory evidence of having completed any course of study required in any year of the Cornell Medical College, may upon passing a satisfactory examination be excused from attendance upon instruction in that subject, provided they take equivalent additional work in other branches.

All examinations required of students coming from other colleges may be taken either at the commencement or end of the year they enter, as they may elect.

(6) Admission to Special Courses.

Graduates in medicine, or students who desire to pursue a special course without graduation, are admitted to registration as special students without Regents' or other preliminary examination. Such special courses do not count in any way as part of the four-years' course, required of candidates for the degree of doctor in medicine. Further information regarding such courses, fees, etc., may be obtained by addressing the Secretary of the Cornell University Medical College, 414 East Twenty-sixth Street.

REQUIREMENTS FOR ADVANCEMENT IN COURSE.

Students are advanced in course from one year to the next upon passing examinations in the work of that year. As in the academic department of the University, the work of each year is considered final of itself. There is no unnecessary repetition of subjects taught from year to year.

Students who have not succeeded in passing all their examinations will be allowed to enter upon the next year's studies, provided they have not failed in more than two branches. Having failed in more than two branches, they must repeat the work of the previous year.

Having failed in not more than two branches, they must be reëxamined within one month of the opening of the next collegiate year. Should they then fail to pass in the conditioned subject or subjects they must repeat the work in which they have failed in connection with their advanced study and be reëxamined therein at the close of the year. If they again fail in these reëxaminations, they must repeat the entire year's work.

REQUIREMENTS FOR THE DEGREE OF M.D.

1. Candidates for the degree of doctor of medicine must have studied medicine for four full years in an accredited medical college, and the fourth year at least must have been spent in the Cornell University Medical College.

Note. In 1899 only, students may graduate after three full years of study.

2. Candidates must present satisfactory evidence of good moral character and of being not less than twenty-one years of age.

3. Candidates must file with the Secretary of the Faculty the Regents' Medical Student's certificate as evidence of having complied with the requirements for admission (see page 12).

4. Candidates must have taken two courses of practical anatomy (see page 25). They must further have taken the regular course of two weeks at the Lying-in Hospital or its equivalent in practical obstetrical work.

5. In addition to the yearly examinations above specified for advancement in course candidates must pass at the end of the fourth year examinations in medicine, surgery, obstetrics, and gynæcology, including such minor branches as are specified in the curriculum (pp. 38–41).

6. Candidates rejected at the final examination will not be reëxamined until after having repeated their fourth year of study.

7. The degree will not be conferred upon any candidate who absents himself from the Public Commencement without the special permission of the Faculty.

8. The Faculty reserves the right to terminate the connection of any student with the institution *at any time* on the ground of what they may deem moral or mental unfitness for the profession, or improper conduct while connected with the College.

LICENSE TO PRACTISE.

The requirements for admission to examination for license to practise medicine in the State of New York are specified in the following provisions of the Laws of 1896, ch. iii.:

§ 145. *Admission to Examination.*—The Regents shall admit to examination any candidate who pays a fee of $25 and submits satisfactory evidence, verified by oath, if required, that he—

1. Is more than twenty-one years of age.

2. Is of good moral character.

3. Has the general education required preliminary to receiving the degree of bachelor or doctor of medicine in this State.

4. Has studied medicine not less than four full school years of at least nine months each, including four satisfactory courses of at least six months each, in four different calendar years in a medical school registered as maintaining at the time a satisfactory standard. New York medical schools and New York medical students shall not be discriminated against by the registration of any medical school out of the State, whose minimum graduation standard is less than that fixed by statute for New York medical schools. The Regents may, in their discretion, accept as the equivalent for any part of the third and fourth requirement evidence of five or more years' reputable practice, provided that such substitution be specified in the license.

5. Has either received the degree of bachelor or doctor of medicine from some registered medical school, or a diploma or license conferring full right to practise medicine in some foreign country.

SCHOLARSHIPS.

NEW YORK STATE SCHOLARSHIPS.

Under the law of the State the Superintendent of Public Instruction is empowered to award annually a number of free scholarships in Cornell University equal to the number of assembly districts in the State. These scholarships entitle the holder to free tuition for four years in any department of Cornell University. They are awarded on examination to candidates from the general Assembly districts "in consideration of their superior ability, and as a reward for superior scholarship in the academies and public schools of this State."

For particulars in regard to these scholarships, application should be made to the Superintendent of Public Instruction at Albany.

UNIVERSITY UNDERGRADUATE SCHOLARSHIPS.

Pursuant to the action of the trustees there will annually be thrown open to competition for all members of the freshman class who are registered in courses leading to first degree, at a special examination held at Ithaca at the beginning of the freshman year, eighteen scholarships of the annual value of $200 each.

Students of high ability from the State of New York will have the additional advantage of being able to secure state scholarships, as there is nothing in the university statutes to prevent a student from holding both a state scholarship and a university scholarship.

These scholarships will be given for passing examinations which shall average the highest in any three of the following groups, of which group (*a*) must be one. Previous to entering this competitive examination, however,

candidates are required to pass satisfactorily at the University the regular entrance examination in English. *School certificates, Regents' diplomas, and normal school diplomas* are not accepted in place of this English examination.

(*a*) Arithmetic, and algebra through quadratic equations.
(*b*) Plane and solid geometry.
(*c*) Greek.
(*d*) Latin.
(*e*) French.
(*f*) German.

For further information in regard to the scholarships see the Register of Cornell University.

COURSE OF INSTRUCTION.

The essential features of the course are as follows:

1. RECITATIONS.—The study of each branch is begun by compulsory recitations, with the class divided into sections. These recitations take the place of much of the former didactic lecture system, and are extended through the four years.

2. LABORATORY INSTRUCTION.—Thorough laboratory instruction is given and attendance thereat is required in histology, pathology, chemistry, materia medica, clinical microscopy, and bacteriology.

A course of practical obstetrics in the service of the Lying-in Hospital or its equivalent, practical work in operative surgery, and two courses of dissection are required.

3. CLINICAL AND BEDSIDE INSTRUCTION.—Besides the general and special clinics held in Bellevue Hospital, the college building, and in other New York hospitals, *practical clinical* instruction will be given to the third and fourth year classes in sections in the wards of Bellevue Hospital.

Ward work will be conducted for students in small groups, under the instruction of the professors and clinical professors of medicine, surgery, and the special branches in Bellevue and the various hospitals and dispensaries with which this large corps of teachers are connected.

4. GRADATION OF THE COURSE.—No student is allowed to progress to a higher class unless his work in the class next below has attained a satisfactory standard, or unless the conditions allowed have been made good as specified on p. 19. For this purpose attendance on recitations, laboratory exercises, dissection, and ward work is compulsory, and the marks obtained in these exercises help to determine the advancement of the student to the next higher class. Examinations are held during and at the end of each year, which are final for the work of that year.

METHODS OF INSTRUCTION IN THE SEPARATE BRANCHES OF STUDY.

ANATOMY.

Anatomy is taught in the first and second years by lectures, recitations, section demonstrations, and dissection. A review quiz to prepare for state and hospital examinations is held during the fourth year.

LECTURES are confined to practical applied anatomy and are given by the Professor of Anatomy once a week to students of the first year and three times a week to students of the second year. In the first year the lectures embrace the practical anatomy of the bones and joints, following the recitations on these subjects. In the second year, after a short introductory course on embryology, the lectures are devoted to regional, applied, and surgical anatomy, the students being already well grounded in descriptive anatomy.

One lecture a week is given during the second year by the Professor of Practical Anatomy on the nervous system, the shape and relation of the viscera, the joints, etc.

Descriptive anatomy is taught by recitations, section demonstrations, and dissection.

RECITATIONS, from standard text-books, are held by the Instructor in Anatomy twice a week for each section of the first-year class and once a week for each section of the second-year class. During the first year bones, joints, muscles, arteries, and veins are recited upon; during the second year the viscera and the nervous system. Written reviews are held at intervals under the direction of the Professor of Anatomy, the last of which is a general review or examination of the year's work. In the first year the students of each section begin to recite upon the bones of that part which they are to dissect at the end of the first month, and so on through the second and third months.

SECTION DEMONSTRATIONS are conducted by the Professor and Demonstrators of Practical Anatomy once a week for each section during the first and second years. During the first three months of the first year that part is demonstrated the bones of which are being studied and which the members of the section are to dissect the next following month. The students are taught how to dissect, what to find, and where to find it. After this the joints are demonstrated and a preliminary demonstration of the viscera is given. In the second year, the brain and nervous system, organs of sense, viscera, and perineum are demonstrated.

DISSECTION.—The dissection of six parts (two courses) is required, and more may be done at the option of the student. Three to five parts may be dissected in the first year; one to three, or more, in the second year. In the first year, dissection is commenced after the recitations and section demonstrations of the first month have prepared each student for the part assigned, and so on for the first three parts.

In the dissection of the second three parts the work of the first course, including the joints, is reviewed, and in addition the dissection of the viscera and minuter parts is required. Students are examined and marked on the dissection of each part required. Prepared bones are loaned to students during the session from a large collection kept for this purpose.

Preliminary training in comparative anatomy is very desirable. A *practical* in addition to a *written examination* is held by the professor of anatomy at the end of the second year. At the end of the first year there is a written review or examination on the work of the year.

PHYSIOLOGY.

Instruction in this branch is given by recitations and demonstrations during the entire session to the first and second year students.

RECITATIONS.—The first-year students recite twice weekly from a standard text-book, completing the entire

subject, except the nervous system and the special senses. During the second year they recite once a week, devote their time to the nervous system and special senses, and review the work of the preceding year. The instructor, by means of fresh dissections, models, and additional explanations, is enabled to make the more difficult portions of the subject comprehensible.

LECTURES.—The lectures by the professor are so far as possible experimental and illustrative, particular attention being paid to the practical application of physiological principles of medicine and surgery.

The physiological laboratory is amply provided with models and apparatus for illustration and for original research.

HISTOLOGY.

The work in this department is conducted throughout the first year by means of recitations and laboratory exercises.

RECITATIONS.—Recitations are held weekly throughout half the first year on subjects assigned from a standard text-book on histology.

LABORATORY EXERCISES, two-hour sessions, are held twice each week through half the year. The work comprises instruction in the structure and use of the microscope; the preparation, hardening, embedding, cutting, staining, and mounting of all the various normal tissues of the body, together with special methods for the preparation of blood, bone, and the nerves for histological study.

Theoretical study of a tissue or organ is immediately followed by its practical demonstration in the laboratory, and a knowledge of its entire histological structure is acquired before the physiological study of its functions is entered upon.

An examination is held at the close of the course which constitutes part of the final examination in physiology.

EQUIPMENT.—The histological laboratory, comprising the greater portion of the fifth floor of the Loomis Labora-

tory, is provided with suitable tables and projection apparatus. Each student is supplied with a new model Leitz microscope of improved pattern, and with staining and mounting fluids, enabling him to stain and permanently mount the tissues used throughout the course.

Tissues thus mounted are the property of the student and are of great value to him for future reference.

The ample facilities for obtaining anatomical material permit the general use of tissues from the human body, which is supplemented whenever desirable by preparations from the lower animals.

Graduates and students who have pursued courses in biology at academic colleges will be given every opportunity for advanced work and original research.

BACTERIOLOGY.

Bacteriology will be taught the students of the first year by laboratory exercises for two hours twice a week for one month. The course will include demonstration of the principal bacteria concerned in familiar pathological processes, together with the study of their culture media, methods of growth, staining reactions, etc.

Students of the fourth year may take an elective course in advanced bacteriology.

The Bacteriological Department is thoroughly equipped with all the necessary apparatus. The collection of cultures is very extensive, and special students will be provided with conveniences for the study of bacteriology such as to meet every possible requirement.

CHEMISTRY, PHYSICS, AND TOXICOLOGY.

Students of the first year will receive two lectures each week on physics. Those of the second year will receive one lecture each week on organic and physiological chemistry. Those of the third year will receive one lecture each week on toxicology.

Students of the first year will recite twice each week on

physics and the principles of chemistry and mineral chemistry. Those of the second year will recite once weekly on organic and physiological chemistry.

Laboratory instruction will be given students of the first year six hours weekly during one-half of the session. This course will consist of an experimental study of the commoner elements and compounds in illustration of the recitation course, and of training in the processes of qualitative analysis of inorganic substances.

After the session of 1898–99 students of the second year will receive four hours' laboratory instruction weekly during one-half the term in physiological and toxicological chemistry.

Each student is fully supplied with all apparatus and chemicals required, except urinometers, which are carefully corrected for the student that they may serve for future use.

These courses are personally conducted by the Professor of Chemistry and Physics, assisted by the instructors.

First-year students presenting satisfactory evidence of having performed equivalent work in chemistry and physics will be excused from first-year work in this department, and be given advanced laboratory work equivalent in hours to that omitted.

MATERIA MEDICA AND THERAPEUTICS.

Instruction is given in this department by means of lectures, clinical instruction, recitations, and practical laboratory work.

LECTURES.—These are given by the professor once a week to the second-year students and once a week to the third-year students. They are confined almost exclusively to therapeutics, as it is believed that materia medica can best be taught by recitations and by laboratory work.

The physiological action of drugs will receive special attention and their therapeutic application will be explained, so that the treatment of disease may be on a systematic basis.

Lectures will be given on remedial agents other than

drugs, such as massage, dietetics, climatology, mineral waters, and hydropathy.

Clinical Instruction.—A new departure in the teaching of therapeutics will be made by affording the stuents of the third year opportunity to observe the effects of the different remedies, including electricity, baths, douches, etc., on the natural course of disease. To accomplish this the classes will be divided into small sections and taken by the professor into the wards of Bellevue Hospital. The treatment of the different diseased conditions observed will be systematically studied, and opportunities will be given to the members of the class to make personal examination of the patients and to watch the modification of disease produced by the remedies prescribed; a general medical clinic will be held by the professor once a week in the amphitheatre of Bellevue Hospital.

Recitations.—Students of the second year will recite to the instructors twice a week from a standard textbook. During the third year a recitation will be held once a week on therapeutics.

The recitations will embrace a study of the action of all the more valuable remedial agents in connection with the description of the drugs themselves.

Each student will be thoroughly drilled in prescription writing and in the doses of the more important drugs.

Examinations will be held at stated times during the session by the professor to enable him to judge of each student's progress.

Laboratory Work.—The course of laboratory instruction is taken during the first year, and consists of four hours each week for half the year. The class is divided into small sections, and is under the personal supervision of the instructor. The method of instruction is distinctly practical. The student is made familiar by the laboratory work with the physical and chemical properties of drugs. This course includes such subjects as the forms of drugs, their weight and bulk, the measurement of solid and fluid drugs, methods of administering medicines, particularly with reference to appropriate combinations, and the demon-

stration of solubilities. The subject of incompatibilities is clearly demonstrated.

Actual practice is given in the employment and application of the various therapeutic agents used in medicine, such as the hypodermic syringe, aspirators, cups, cauteries, stomach-pump, stupes, and the different varieties of baths and packs. Prescription writing is taught throughout the course, and each prescription written is compounded by some member of the section.

The materia medica laboratory is equipped for pharmaceutical instruction, and students are taught by practical exercises in the preparation and compounding of drugs.

The laboratory is provided with a full assortment of crude drugs and the various preparations of the materia medica, also with complete appliances for instruction in the remedial agents which are not medicines.

PATHOLOGY.

One lecture each week will be given to students of the third year on general pathology, considering the causes and processes of disease from both the medical and the surgical standpoint, illustrated by pathological specimens, diagrams, and projections on the screen of photomicrographs.

Students of the second year will recite once each week from a standard text-book.

Laboratory instruction will be given students of the second year in two sections, each for six hours weekly during one-half of the session.

The laboratory course embraces the following:

1. Study of microscopical sections illustrating all the lesions of the various organs, including the brain, cord, and nervous system. These sections are prepared and retained by the students.

2. Demonstration of gross pathological specimens illustrating the various sections as they are studied.

3. Study of typical varieties of all the tumors and pathological fluids and secretions.

4. Microscopical examination of the urine, including casts and urinary deposits.

5. Micro-organisms and the method of staining tubercle bacilli, gonococci, diphtheria bacilli, malaria plasmodia, etc.

6. Methods of blood examinations.

An examination is held at the close of the course.

The pathological laboratory is provided with every convenience for private investigation, and more extended and exhaustive instruction than may be afforded in the regular courses. Opportunities will be furnished to graduates and advanced workers personally to conduct autopsies on pathological and medico-legal cases.

Microtomes, and all the necessary chemicals and reagents, are at the disposal of those working in the laboratory.

Two private rooms and a fully equipped workshop are connected with this department.

The Photographic Department is provided with complete equipment for photographing gross specimens, and especially for photomicrography. The newest apparatus made by Zeiss has been imported for this purpose.

POST-MORTEM EXAMINATIONS.

In addition to the scholastic instruction which will be given in pathological anatomy, students will be taken by the Curator to the post-mortem room of Bellevue Hospital, where examinations will be made in their presence, giving them opportunities personally to perform autopsies and to study diseased tissues and organs *in situ*.

Once a week a post-mortem is made before the class on either a medico-legal case or a case with complete clinical history. In the latter instance the diseased processes found are studied in connection with the clinical phenomena observed.

MEDICINE.

The study of medicine is begun in the *second year* by recitations from an elementary text-book, in which the

subjects of etiology and the typical symptoms of disease are emphasized. The subject of physical diagnosis is also begun in the latter part of this year, for which study the students are divided into small sections which meet in the hospitals and dispensaries.

In the *third year* recitations from an advanced text-book are conducted, special emphasis being given to symptomatology, diagnosis, and treatment, physical diagnosis is continued, and systematic ward work is begun. In the latter, section classes are drilled at the bedside by the Instructor in General Medical Diagnosis, and the students in small sections also accompany the Professor of Medicine and Professors of Clinical Medicine upon their rounds through the wards of such hospitals as the Bellevue, the Presbyterian, the New York, or others with which they may be connected. Each student will be drilled in the systematic examination of patients, and will be required to keep complete histories of special cases to which he may be assigned, and which he is required to observe from day to day. With the coöperation of the Instructor in Clinical Microscopy he will make examinations of the urine, sputum, blood, etc., of the patients under observation.

General medical clinics will be held twice a week in the amphitheatre of Bellevue Hospital, at which selected cases are systematically presented to the class, students being called upon in rotation to demonstrate symptoms and make diagnoses. A course of ten lectures will be given by the Professor of Medicine, which will be designed as introductory to the systematic bedside teaching which he conducts upon his hospital rounds. The course will cover such general topics as the theory and nature of infections, the theory and significance of fever, cachexias, diatheses, the blood in disease, etc.

During the *fourth year* the ward work in the hospital rounds and the general medical clinics will be continued. A special elective course will be offered in clinical microscopy. General review quizzes will be held to fit students for their hospital and state examinations.

During the latter part of the term medical conferences

will be presided over by the Professor of Medicine or his assistants, at which students will present detailed histories of cases which they may have studied for at least two or three weeks, which will be open to criticism and discussion by other members of the class. Hypothetical cases may also be discussed at these meetings. A course of ten lectures upon symptomatology will be delivered by the Professor of Medicine.

SURGERY.

Surgery will be taught in the recitation room, at the bedside, and at hospital clinics: a few didactic lectures will be given and conferences will be held in the fourth year.

In the second year the students are required to attend recitations on the principles of surgery throughout the term, two hours a week. For this purpose the class is divided into small sections to insure thorough work; and so far as time permits will also receive instruction at the bedside.

In the third year recitations are continued upon regional surgery; the class is instructed in sections in Bellevue Hospital in history taking and methods of surgical examination and diagnosis, two or three hours a week for part of the term; bedside instruction is given daily in several hospitals to small groups, and formal clinics are held in Bellevue, New York, and other hospitals; about twenty didactic lectures will be given by the Professor of Surgery.

In the fourth year the students will receive clinical instruction in small groups in several hospitals and dispensaries upon the general and the special branches—eye, ear, nose and throat, genito-urinary, dermatology, and orthopædics; will attend the clinics and will have a review quiz in preparation for examination.

Conferences at which the students and an instructor will meet for the discussion of specified topics and cases will be held during a portion of the year.

The opportunities for instruction in the special branches are exceptionally ample. There will be several clinical

teachers in each subject, each with hospital and dispensary services, the student will be enabled directly to examine and study cases and will have a certain choice as to the time given to each branch.

The teaching of orthopædics will include instruction in making and fitting special appliances.

Operative surgery will be taught in the fourth year in sections, each member of the class doing all the principal surgical operations upon the cadaver.

OBSTETRICS.

Instruction in obstetrics will be given during the second, third, and fourth years by (1) recitations, (2) illustrative lectures, (3) attendance upon cases of confinement, and (4) manikin practice.

RECITATIONS from a standard text-book will be held by the instructor in obstetrics during the second year upon the physiology and during the third upon the pathology of obstetrics, the latter including obstetric surgery.

These recitations are so scheduled as to cover the entire field of the subject laid out for the college year, are supplementary to the work of the Professor of Obstetrics during each of these two years, and prepare the student for an intelligent appreciation of his subsequent illustrative lectures, attendance upon cases of confinement, and manikin practice.

The ILLUSTRATIVE LECTURES comprise a systematic course running through the third year upon the physiology and pathology of obstetrics.

These lectures are theoretical to a limited extent only, being mainly demonstrative and illustrative in character. To this end ample blackboard space is used, as well as an abundant collection of pelves, entire, normal, and deformed, sagittal and mesial sections of the same, and in addition a supply of diagrams, charts, carefully selected plaster composition and metal models, wet and dry preparations and instruments.

In conjunction with these lectures additional recitations

are held by the Professor of Obstetrics upon the subject-matter of the college year and for final review.

ATTENDANCE UPON CASES OF CONFINEMENT.—Each candidate for the degree of M.D. is required to present a satisfactory certificate to the effect that he has attended at least six cases of confinement.

The certificates of the regular maternity hospitals are accepted by the Faculty, but the Lying-in Hospital, Second Avenue and 17th Street, New York, is recommended. Students who do not otherwise fulfil the above requirement will be able to do so by taking the regular course at this institution.

During the student's attendance upon his practical maternity course he may be excused from the exercises of the College, but it is strongly recommended that the student fulfil the above requirement in the vacation between the third and fourth years, or during the latter year.

MANIKIN PRACTICE is given to sections of the class during the fourth or senior year, and consists mainly of work by individual students upon the manikins, under the supervision and criticism of an instructor.

In addition, these meetings will be made the occasion for review recitations and "obstetric conferences" upon the illustrative lectures of the third year, and the student's work in his attendance upon confinement cases. By this means each individual student's standing in the department of obstetrics can be readily ascertained.

GYNÆCOLOGY.

Instruction in this department will be given in recitations, clinical demonstrations to the class in sections, and clinics. It is confined to the third and fourth years of the course. The recitations cover the entire subject of gynæcology, and are held throughout the third year one hour a week. The clinical demonstrations are given at Bellevue Hospital and at the dispensary; they are restricted to the fourth year and extend through the entire session. The

clinics are held in the hospital amphitheatre and are intended for members of the third and fourth-year classes.

DISEASES OF CHILDREN.

This course will embrace clinical instruction and section teaching in all the important diseases of infancy and childhood, and the care and feeding of infants.

Instruction in contagious diseases will be given at the bedside in the Willard Parker Hospital.

DISEASES OF THE NERVOUS SYSTEM.
MENTAL DISEASES.

Instruction in diseases of the nervous system will be given by lectures and in section teaching at the bedside in the hospital wards and dispensaries.

The clinics upon mental diseases will be abundantly illustrated by patients from the asylums. Modern psychiatry and the medico-legal aspects of insanity will receive special attention.

SPECIAL BRANCHES.

Instruction in the special branches, ophthalmology, otology, laryngology, insanity, orthopædics, dermatology, venereal and genito-urinary diseases, will be given by the various Clinical Professors and their assistants in the hospital wards and dispensaries with which they are connected, and by lectures.

CURRICULUM IN DETAIL OF THE FOUR YEARS OF THE COURSE.

(SHOWING THE WORK FOR THE INDIVIDUAL STUDENT.)

(The right is reserved to make such changes in the detail of the curriculum as experience may prove desirable.)

FIRST YEAR.

1. ANATOMY.—One lecture each week on the applied anatomy of the bones and joints following the recitation on these subjects. Recitations, two hours each week. Section demonstration, one hour each week to each section. Dissection, three to five courses of four weeks each, two or more hours daily.

2. CHEMISTRY AND PHYSICS.—Two lectures each week on physics. Recitations, two hours each week on chemistry, and chemical laboratory six hours each week for half the session.

3. PHYSIOLOGY.—Two demonstrations and two hours of recitation each week.

4. HISTOLOGY.—Recitations one hour, and laboratory four hours each week for half the term.

5. BACTERIOLOGY.—Laboratory, two hours twice a week for one month.

6. MATERIA MEDICA.—Laboratory work, four hours each week for the half session.

The class is divided into sections for recitations and laboratory exercises, and the sections are so arranged that the work in the different laboratories is evenly distributed throughout the term. In the course of the recitations

written reviews are held every few weeks, the papers of which are examined by the professors of the respective branches.

SECOND YEAR.

1. ANATOMY.—Surgical and Regional Anatomy and Embryology. Three lectures weekly. Recitation one hour each week. One demonstration lecture weekly. Section demonstrations, one hour each week. Dissection, one to three courses of four weeks each, two or more hours daily.

2. ORGANIC AND PHYSIOLOGICAL CHEMISTRY.—One lecture each week. Recitation once a week.

3. CHEMICAL LABORATORY.—Four hours weekly for half the term in physiological and toxicological chemistry (after the session of 1898–99).

4. PHYSIOLOGY.—Two demonstrations weekly. Recitations one hour each week.

5. MATERIA MEDICA.—Two recitations each week.

6. THERAPEUTICS.—One lecture each week.

7. MEDICINE.—Recitation one hour weekly.

8. SURGERY.—Recitations two hours weekly.

9. OBSTETRICS.—One recitation weekly.

10. PATHOLOGY.—One recitation weekly.

11. PATHOLOGICAL LABORATORY.—Pathological anatomy, six hours each week for half the term.

12. PHYSICIAL DIAGNOSIS IN SECTIONS, in the dispensaries and hospitals.

The second-year class is divided into sections for recitations, laboratory work, and physical diagnosis. Written reviews are held in the course of the recitations.

The study of the following branches is completed during the second year and the examinations on them are final.

(1) Anatomy (written and practical); (2) chemistry and physics; (3) materia medica; (4) physiology. (See examinations and graduation, pp. 18 to 20.)

THIRD YEAR.

1. MEDICINE.—Recitations two hours each week. Physical diagnosis in sections in the hospital. General medical diagnosis in sections at the bedside. General medical clinics two hours each week in Bellevue Hospital. Ward visits in small sections with the Professor and Clinical Professors of Medicine in Bellevue and other hospitals. Ten introductory lectures.

2. PATHOLOGY.—Lecture one hour weekly. Autopsies at the morgue in sections.

3. THERAPEUTICS.—Lectures one hour each week; one hour bedside teaching. Recitations one hour weekly.

4. OBSTETRICS.—Two illustrative lectures weekly. One recitation weekly.

5. GYNÆCOLOGY.—One clinic in obstetrics and gynæcology. Recitation one hour each week.

6. SURGERY.—Lectures, twenty hours. General surgical clinics, two each week. Bedside teaching in sections in Bellevue Hospital. Ward work in small sections in Bellevue and the New York hospitals with the Professor and Clinical Professors of Surgery. Recitations on regional surgery, two hours weekly.

7. HYGIENE AND TOXICOLOGY.—Lecture, one hour each week.

8. DISEASES OF CHILDREN.—Clinic, one hour each week. Section work in dispensary.

9. DISEASES OF THE NERVOUS SYSTEM.—Lecture, one hour each week for half the term. Section work.

The recitations in medicine will include the subjects of diseases of children and diseases of the nervous system.

FOURTH YEAR.

1. MEDICINE.—Ward work in the hospitals. General medical clinics twice a week. Exercises in history taking and in clinical microscopy continued. Recitations, review quizzes for State Board and hospital examinations.

Ten lectures on symptomatology. Conferences.

2. SURGERY.—Ward work in the hospitals. General sur-

gical clinics twice a week. Operative surgery in sections. Review quizzes. Conferences.

3. Obstetrics.—Regular practical course in a lying-in hospital. Manikin practice. Review quizzes.

4. Gynæcology.—Clinics, and section demonstrations.

5. Special Branches.—Lectures and clinical instruction in small sections in the hospitals and dispensaries in the special branches: eye, ear, nose and throat, orthopædics, skin, insanity, venereal diseases. Post-mortem examinations. Legal medicine lectures. Advanced bacteriology and clinical microscopy (optional).

For those students admitted after two full courses in another accredited medical college, who elect to come up for graduation in 1899, the studies of the year will comprise those of the third and fourth years, except that less time can be given to the special branches, and ward work and review quizzes and conferences will be omitted.

GENERAL INFORMATION, EQUIPMENT, ETC.

The Cornell University Medical College will be conducted in the building of the Loomis Laboratory, opposite Bellevue Hospital, and in the college building in the grounds of Bellevue Hospital, which will be temporarily occupied pending the completion of the extensive new college buildings, plans for the construction of which are now in active development.

LOOMIS LABORATORY (FOUNDED 1886).

It is intended that this laboratory shall not only serve the purposes of undergraduate instruction in such subjects as can be best taught in a laboratory, but also that it shall be available to physicians who may desire to pursue further study or original research in the various departments of laboratory investigation connected with the science of medicine.

The laboratory building is thirty-five by ninety feet in superficial area, five stories in height, thoroughly ventilated, fire-proof, and provided with an elevator, steam heat, high and low-water pressure, gas and electric light.

The first floor is devoted to the laboratories of materia medica and of physics.

The second floor is devoted to the laboratory of chemistry, and is divided into a general laboratory, a laboratory of special research, balance-room, furnace-room, and laboratory of toxicology.

The third floor contains the laboratories of physiology and histology.

The fourth floor is occupied by the laboratories of pathology, photographic rooms, museum, and workshop.

The fifth floor contains the bacteriological laboratories in front, and in the rear a large room used by the classes in histology and pathology.

The position of this general class-room above the surrounding buildings, its equipment with suitable tables, necessary reagents, microscopes, and accessories for class work, provides the best accommodation possible for laboratory instruction. It is abundantly lighted upon three sides, is well ventilated, is fitted with separate lockers for each student, and has a seating capacity for one hundred men.

NEW BUILDINGS.

Plans for new buildings with ample accommodations for clinics, section teaching, lecture-rooms, recitation-rooms, dissection-rooms, etc., are being actively developed.

DISPENSARY.

The Medical College has the privilege of using for instruction a portion of the City Dispensary belonging to Bellevue Hospital, and situated in the college building where upward of 50,000 patients annually receive medical treatment.

HOSPITALS.

The hospital facilities for instruction possessed by the College are unsurpassed by any other college in this country. The Faculty of the Cornell University Medical College is entitled to utilize for teaching purposes the vast quantity and variety of clinical material of ten great city hospitals, namely, the Bellevue, City, Maternity, Gouverneur, Harlem, Almshouse, Work-house, Incurables, Randall's Island, and Fordham. The service of the Society of the Lying-in Hospital, a course of instruction in which or its equivalent is obligatory for the students. In ad-

dition to these hospitals, the large teaching corps of the medical faculty is represented upon the visiting staffs of many other hospitals and dispensaries in the city where the university students are invited to attend clinics. Among these are the New York Hospital, the Presbyterian Hospital, New York Eye and Ear Infirmary, Orthopædic Dispensary and Hospital, Skin and Cancer Hospital, Hospital for Contagious Diseases.

HOSPITAL APPOINTMENTS.

The students and graduates of the Cornell University Medical College are entitled to compete on equal terms with those of other colleges for positions on the resident staff of Bellevue Hospital, and the other hospitals of the city.

Some of these hospitals are: The City, Harlem, Gouverneur, New York, St. Luke's, Roosevelt, Presbyterian, St. Vincent's, St. Francis, Mount Sinai, German, and Hudson Street hospitals and the hospitals in Brooklyn and Jersey City, Newark, Paterson, etc.

The requirements, the times of examination, and the period of service differ. The details can be learned by application, written or in person, to the superintendents or the secretaries of the medical boards of the various hospitals, or to the Secretary of the Cornell University Medical College, 414 East 26th Street, New York City.

FEES AND EXPENSES.

ALL FEES ARE PAYABLE IN ADVANCE.

Fees for the Four Years' Course.

First Year.

Tuition	$150
Registration	5
Dissection ticket	10
Laboratory course in chemistry	10
Laboratory course in normal histology	10
Laboratory course in materia medica	10

Second Year.

Tuition	$150
Registration	5
Laboratory course in pathology	10
Dissection ticket	10
Laboratory course in physiological chemistry after 1898–99	10

Third Year.

Tuition	$150
Registration	5
Course in practical obstetrics	20

Fourth Year.

Tuition	$150
Registration	5
Operative surgery on cadaver, including material	15
Graduation fee	30

Note.—The graduation fee is payable on registering for graduation. The tuition fees for the first two years at Ithaca are identical with those of the same period in New York.

FEES FOR SPECIAL STUDENTS.

The Dissecting ticket may be taken out separately after registration.

Dissection	$10.00
Laboratory course in chemistry	15.00
Laboratory course in normal histology	15.00
Laboratory course in pathology	15.00
Laboratory course in materia medica	15.00
Operative surgery on the cadaver, including material	15.00
Clinical Microscopy	15.00
Bacteriology	15.00

Fees must be paid according to the foregoing schedule by all matriculates, including those who have already received the degree of M.D. Tickets must be taken out and paid for at the beginning of the session.

BOARD.

Arrangements are made by the clerk so that each matriculate of the College will be furnished with good board, including room rent, at a convenient distance from the college building, at the very low rate of $5 to $6 per week. Information as to board may be obtained from the clerk, at his office in the College, or from the Secretary of the Intercollegiate Young Men's Christian Association, 129 Lexington Avenue.

SUGGESTION.

It would be to the advantage of students if they would register a few days in advance of the opening exercises, secure boarding places, and purchase books, so that their studies may not be interrupted in the beginning. The Secretary is in his office every day after September 1, at 2 P.M.

TEXT-BOOKS.

As a rule only the latest editions of text-books should be purchased.

Anatomy—Gerrish; Morris; Gray; Quain; Haynes, "Guide to Dissection"; Treves, "Surgical Applied Anatomy"; Haynes, "Manual of Anatomy."

Physiology—Stewart, Foster, Landois.

Histology—Piersol.

Chemistry—Witthaus, "Manual of Chemistry," fourth edition; Witthaus, Laboratory Course, fourth edition; Ganot's "Physics."

Medicine—Second year, Lockwood; third year, Tyson. Da Costa, "Medical Diagnosis"; or for reference, Loomis-Thompson, "American System of Practical Medicine."

Surgery—Tillmann; "American Text-Book"; Park's Surgery; Stimson's "Fractures and Dislocations"; Stimson's "Operative Surgery."

Genito-Urinary—White and Martin; Hyde and Montgomery.

Obstetrics—Lusk; Winckel.

Gynæcology—Penrose; Kelly; Pozzi.

Materia Medica and Therapeutics—Second year, Curtis, "General Medical Technology"; White's "Materia Medica and Therapeutics"; third year, Hare, "Practical Therapeutics"; Thompson, "Practical Dietetics."

Pathology—Green, "Pathology and Morbid Anatomy"; Ziegler, "Pathological Anatomy and General Pathology."

Dermatology—Crocker; Kaposi.

Ophthalmology—Noyes; Schweinitz; Norris and Olliver.

Otology—Roosa; Politzer; Pomeroy.

Nervous Diseases—Dana; Gower; Dercum.

Diseases of Children—J. Lewis Smith; Goodhart.

Duane's "Student's Medical Dictionary."

For further particulars, address the Secretary, Cornell University Medical College, 414 East 26th Street, New York City.

CORNELL UNIVERSITY

COMPRISES THE FOLLOWING DEPARTMENTS:

The **GRADUATE DEPARTMENT** (Degrees A.M., Ph.D., etc.)

The **ACADEMIC DEPARTMENT, or Department of Arts and Sciences** (Degree A.B.)

The **COLLEGE OF LAW** (Degree LL.B.)

The **MEDICAL COLLEGE*** (Degree M.D.)

The **NEW YORK STATE VETERINARY COLLEGE** (Degree D.V.M.)

The **COLLEGE OF AGRICULTURE** (Degree B.S.A.)

The **NEW YORK STATE COLLEGE OF FORESTRY** (Degree B.S.F.)

The **COLLEGE OF ARCHITECTURE** (Degree B.Arch.)

The **COLLEGE OF CIVIL ENGINEERING** (Degree C.E.)

The **SIBLEY COLLEGE of Mechanical Engineering and Mechanic Arts** (Degree M.E.)

FOR copies of the University Register and for additional information, apply to

REGISTRAR, CORNELL UNIVERSITY,
ITHACA, N. Y.

* The full four-year course of the CORNELL UNIVERSITY MEDICAL COLLEGE is given in the City of New York, but the first half of it—the work of the first and second years—is also given at Ithaca, where it may be taken by men students, and where alone it can be taken by women students (for whom a home is provided in the Day College for Women). Both men and women students must take the last two years of the course in New York City. Special announcements of the Medical College and information of every kind regarding it will be furnished on application to

SECRETARY, CORNELL UNIVERSITY MEDICAL COLLEGE,
414 East 26th Street, New York City.

School of Practical Hygiene

AND

Sanitary Science

CORNELL UNIVERSITY
MEDICAL COLLEGE

IN

New York City

ANNOUNCEMENT

1899-1900

NEW YORK CITY
PUBLISHED BY THE UNIVERSITY

The Knickerbocker Press
New York

Practical Hygiene and Sanitary Science

Cornell University Medical College

CORNELL UNIVERSITY announces the establishment, as a department of its Medical College, of a School of Practical Hygiene and Sanitary Science in New York City.

THE OBJECTS of this school are: First. To afford to physicians connected with local health boards or public institutions, or otherwise interested in sanitary matters, special instruction in the various branches of Practical Hygiene and Sanitary Science. Second. To provide for the undergraduate students of Cornell both systematic obligatory instruction in the principles of Hygiene, and further optional courses of advanced study.

TWO COURSES ANNUALLY.—While the undergraduate systematic course in General Hygiene will extend through the regular winter term, the Post-Graduate Courses will be duplicated in two sessions of six weeks each to accommodate physicians coming from a distance.

The Fall Term will begin on the first Tuesday in October and continue for six weeks, except the Fall Term of 1899, which, having been unavoidably postponed, will begin on the first Tuesday in January and continue six weeks.

The Spring Term will begin on the third Tuesday in May and continue for six weeks.

THE STAFF OF INSTRUCTION consists at present of the following:

W. M. POLK, M.D., LL.D., *Dean.*

RUDOLPH A. WITTHAUS, M.D., *Professor of Chemistry.*

CHARLES L. DANA, M.D., *Professor of Nervous Diseases.*

JOSEPH E. WINTERS, M.D., *Professor of Diseases of Children.*

ALEXANDER LAMBERT, M.D., *Professor of Clinical Medicine.*

JAMES EWING, M.D., *Professor of Pathology.*

ALBERT L. WEBSTER, *Lecturer on Sanitary Engineering.*

CHARLES A. MEADE, *Lecturer on Municipal Sanitation.*

ROBERT C. TAYLOR, *Lecturer on Sanitary Laws.*

W. T. JENKINS, M.D., *Commissioner of Health—Lecturer on International Quarantine.*

CHARLES NORRIS, M.D., *Instructor in Pathology of Infectious Diseases.*

OTTO SCHULTZE, M.D., *Instructor in Gross Pathology.*

LOUIS W. RIGGS, PH.D., *Instructor in Chemistry.*

CHARLES N. B. CAMAC, M.D., *Instructor in Clinical Microscopy.*

WILLIAM R. WILLIAMS, M.D., *Instructor in Hygiene.*

PLAN OF INSTRUCTION.

Instruction will be given under the following classification :

Lectures, in such subjects (*e. g.*, Sanitary Laws, etc.) as can only be taught in this manner, or in amplification of other methods of instruction.

Experimental demonstrations of sanitary methods and appliances.

Clinical instruction upon infectious diseases.

Visits to and demonstrations of the operation of sanitary processes (disinfection plants, vaccine, and antitoxin laboratories, etc.), and visits to hospitals, schools, demonstration of factories, model tenements, etc.

Laboratory instruction.

LECTURES AND DEMONSTRATIONS.

Professor Witthaus.

WATER SUPPLY.—Three lectures on the uses, sources, quantity, quality, sources and kinds of contamination—Characters of pure

and impure water—Purification of water. (See also *Sanitary Engineering* and *Laboratory Courses.*)

Air Supply.—One lecture on the Composition of air; sources and nature of contamination of air; simple tests for purity; respiration; consequences of overcrowding. (See also *Ventilation, etc.*, and *Laboratory Courses.*)

Food and Beverages.—Five lectures on the composition, adulterations, standards of purity and nutritive value of milk, milk products, cereal foods, etc., and of beer, wine, and spirits—Putrid poisons and food poisonings. (See also *Laboratory Courses.*)

Disposal of the Dead.—One lecture on the Sanitary and Medico-legal considerations of putrefaction, burial, cremation, embalming.

Professor Lambert.

Infectious Diseases.—Two lectures on the nature and history of infection and theories of immunity.

Methods of Disinfection, etc.—Six lectures and demonstrations—Disinfectants, antiseptics, and deodorants—Methods of disinfection of rooms, dejecta, clothing, bedding, carpets, etc. —Isolation; quarantine; vaccination; preventive inoculation —Routine work of Sanitary officials with reference to infectious diseases.

Dr. Williams.

General Hygiene.—Twenty lectures covering a general consideration of its scope and practical application—Hygiene of Schools, with special reference to the eyes and curvature of the spine—General and specific causation of Epidemics, modes of transmission and prophylaxis of the various diseases—Effects of climate on health—Occupation, diseases—Vital statistics.

Mr. Webster.

Sanitary Engineering.—Six lectures and demonstrations covering the following topics: *Buildings:* Selection of sites; character of soil; exposure; surface and underground drainage; preparation of site; excavations; foundations; waterproofing; building materials; heating; lighting; ventilation;

plumbing and drainage ; sewage disposal in the country ; sewage filtration ; cesspools, etc. *Water Supply :* Protection against contamination ; storage ; protection against fire ; distribution for fire service. *Factory Waste and Nuisance.*

Mr. Meade.

MUNICIPAL SANITATION.—Six lectures and demonstrations on the following topics : *Street Cleaning :* Sources and prevention of dirt ; factors in work of street cleaning ; systems and methods in use ; snow removal ; cost and its relation to public health. *Refuse Disposal :* Town and city wastes ; trade and factory refuse ; analysis ; systems in use ; possible methods of treatment ; cost and results. *Sewage Systems and Sewage Disposal :* Removal of sewage ; methods of disposal and their relations to public health ; cost and results. *Public Nuisances :* Smoke nuisance, etc.

Mr. Taylor.

SANITARY LAWS AND REGULATIONS.—Lectures on the statutory constitution of Health Boards, their powers and duties and those of Health Officers, state, local, and metropolitan. Nuisances : what constitutes a nuisance ; how abated; form of procedure ; offensive trades, slaughter-houses, smoke nuisance, nuisance from noise, etc. Legislation concerning: *A.* Habitations ; tenement houses ; sweat shops ; lodging houses ; cellars ; factories and workshops. *B.* Quarantine, federal and state. *C.* Purity of water supply. *D.* Purity of food and drugs. *E.* Infectious diseases ; vaccination. *F.* Registration of vital statistics.

CLINICAL INSTRUCTION AND DEMONSTRATIONS.

Professor Dana will conduct clinics on occupation neuroses, chronic lead, arsenic, and mercurial poisoning, and alcoholism, etc., in Bellevue Hospital.

Professors Winters and **Lambert** will conduct ward demonstrations to small sections on infectious diseases, such as typhoid fever, tuberculosis, malaria, etc., in the wards of Bellevue Hospital, and on contagious diseases in the Willard Parker Hospital.

VISITS WITH DEMONSTRATIONS will be made under the direction of Professors WINTERS and LAMBERT to Quarantine, North Brothers' Island, and other hospitals possessing isolation rooms and disinfecting plants, to vaccine and antitoxin laboratories, etc.

Mr. Webster will conduct visits of inspection to the tenement districts, model tenements, lodging houses, and public and private buildings, illustrating faulty and perfected sanitary engineering.

Mr. Meade will conduct visits to the plants of the Street Cleaning Department, and demonstrate the methods of street cleaning and the operation of disposal works.

LABORATORY INSTRUCTION.

Professor Ewing will give laboratory instruction in the microscopic study of tissues illustrating principally the infectious diseases, as: Tuberculosis, syphilis, leprosy, pneumonia, typhoid fever, diphtheria, malaria, dysentery, yellow fever, etc., in courses of twelve two-hour sessions.

[These courses require a general knowledge of the microscopical appearances of diseased tissues, in the absence of which students are recommended to attend the undergraduate course on this subject, which occupies one half of the college year.]

Dr. Norris. *Bacteriology*—An elementary demonstrative course of twelve two-hour sessions is provided for students who are unfamiliar with bacteriological technics. It includes: Methods of preparing culture media and of making artificial cultures and inoculation; Demonstration of pathogenic *mould fungi* and of cultures of pathogenic bacteria; preparation and examination of stained specimens; Discussion of pathogenic action of, and demonstration of action of, antiseptics on bacteria; Demonstration of methods of diagnosis of tetanus, tuberculosis, and hydrophobia by inoculation; Demonstration of elementary methods of bacteriological analysis of air, water, and milk.

For students who are familiar with bacteriological technique there will be special advanced courses in practical laboratory work, in one or more of the branches detailed above. These advanced courses require daily attendance during the morning hours for a variable period.

Dr. Camac will give laboratory instruction in CLINICAL MICROSCOPY in its relation to infectious diseases, in courses of six two-hour sessions, including examinations of pus, sputum, fæces (intestinal parasites), urine, and blood, attention being also given

to secretions from the nose and throat, with special reference to the early recognition of diphtheria.

Dr. Schultze will give six two-hour demonstrations of gross pathology, illustrating the principal infectious diseases, cases of poisoning, and of violent and sudden death. The technique of autopsies, general and medico-legal, will also be demonstrated.

Professor Witthaus and **Dr. Riggs** will give laboratory instruction in special courses in the methods of analysis of water, air, food, and beverages, and demonstrations of methods of examination of unwholesome meat, etc. [These courses will begin with the Spring session of 1900.]

FEES.

Fees for Lectures, Visits, etc.....	$25 00	
Fees for the Pathological Laboratory Courses..	25 00	each.
" " Chemical Laboratory Courses....	25 00	"

For further particulars address

Dr. JOHN ROGERS, *Secretary*,
Cornell University Medical College,
East 26th Street, New York City.

The University reserves the right to make changes in this curriculum as necessity arises.

Cl Library

Cornell University Medical College

Announcement

of the

Summer Courses

for

1900

New York City
East Twenty-sixth Street
Published by the University

INSTRUCTORS IN SUMMER SCHOOL.

Wm. M. Polk, M.D., LL.D., Dean,
Instructor in Gynæcology.

Bertram H. Buxton, M.D.,
Instructor in Bacteriology.

Dever S. Byard, M.D.,
Instructor in Medicine.

Richard E. Brown, M.D.,
Instructor in Medicine.

W. Duff Bullard, M.D.,
Instructor in Surgery.

Charles C. Barrows, M.D.,
Instructor in Gynæcology.

Follen Cabot, M.D.,
Instructor in Genito-Urinary Diseases.

Chas. N. Bancker Camac, M.D.,
Instructor in Clinical Microscopy.

Chas. Norris, M.D.,
Instructor in Pathology.

Warren Coleman, M.D.,
Instructor in Medicine.

Earle Conner, M.D.,
Instructor in Otology.

Coleman W. Cutler, M.D.,
Instructor in Ophthalmology.

Walter A. Dunckel, M.D.,
Instructor in Pediatrics.

J. Clifton Edgar, M.D.,
Instructor in Obstetrics.

M. J. Echeveria, M.D.,
Instructor in Genito-Urinary Diseases.

J. S. Ferguson, M.D.,
Instructor in Histology.

Joseph Fraenkel, M.D.,
Instructor in Neurology.

Wm. C. Gilley, M.D.,
Instructor in Surgery.

Frederick W. Gwyer, M.D.,
Instructor in Surgery and Operative Surgery.

John A. Hartwell, M.D.,
Instructor in Anatomy, Physiology and Surgery.

Forbes Hawkes, M.D.,
Instructor in Surgery.

Sherwood B. Ives, M.D.,
Instructor in Materia Medica and Therapeutics, Practice of Medicine and Physiology.

Thurston G. Lusk, M.D.,
Instructor in Dermatology.

James E. Newcomb, M.D.,
Instructor in Laryngology.

E. O. Parker, M.D.,
Instructor in Gynæcology.

Robert G. Reese, M.D.,
Instructor in Ophthalmology.

L. A. Riggs, Ph.D.,
Instructor in Chemistry.

M. A. Schlapp, M.D.,
Instructor in Neurology.

Wm. Shannon, M.D.,
Instructor in Pediatrics.

Edmund P. Shelby, M.D.,
Instructor in Pharmacodynamics.

Frederick P. Solley, M.D.,
Instructor in Medicine.

Wm. F. Stone, M.D.,
Instructor in Surgery and Anatomy.

Otto H. Schultze, M.D.,
Instructor in Gross Pathology.

Franklin M. Stephens, M.D.,
Instructor in Otology.

George K. Swinburne, M.D.,
Instructor in Genito-Urinary Diseases.

Fielding L. Taylor, M.D.,
Instructor in Surgery.

J. P. Thornly, M.D.,
Instructor in Medicine.

Benjamin T. Tilton, M.D.,
Instructor in Surgery and Genito-Urinary Diseases.

Henry H. Whitehouse, M.D.,
Instructor in Dermatology.

George G. Ward, Jr., M.D.,
Instructor in Obstetrics and Gynæcology.

Wm. R. Williams, M.D.,
Instructor in Medicine.

George Woolsey, M.D.,
Instructor in Surgery.

SUMMER SCHOOL.

CORNELL University will continue during the summer of 1900 the Summer School, which has proved of so much advantage. The courses will cover the period from May 14th to July 28th, and the instruction will be chiefly clinical, with laboratory work and quizzes added.

The courses will be given at the various hospitals and dispensaries by the physicians and surgeons on duty. In addition to the clinical work, practical exercises will be offered in the several laboratories of the College by the instructors in charge. These Laboratory Courses will embrace instruction in Normal and Pathological Histology, Bacteriology, Clinical Microscopy, Chemistry, Pharmacognosy and Pharmacy.

Quizzes on the practical medical branches will be conducted by competent instructors. While the instruction is intended primarily for the present members of the Cornell University Medical College, it will be open to both graduates and undergraduates of other recognized medical schools upon the payment of the registration fee of Five Dollars in addition to the regular fee specified on Page 6.

PLAN OF INSTRUCTION.

THE subjects are Clinical Medicine, Clinical Surgery and dispensary experience with the various special branches of medicine. The course in the medical dispensaries can be so arranged by consultation with the Secretary as to provide advanced work for third- and fourth-year students, and simple physical diagnosis for those who have completed their second year only.

In surgery the dispensaries will provide instruction in the ordinary diagnosis and treatment of minor surgical practice. There will also be an opportunity for advanced students to go into the wards of some of the hospitals and become familiarized by instruction under the attending surgeon with the diagnosis and history taking which is ordinarily required of a hospital interne.

A course in Practical Obstetrics is given at the Mothers' and Babies' Hospital, where the students are under the direction of Prof. J. Clifton Edgar or his assistants.

The opportunities in the specialties include the several dispensary classes in Diseases of Children, Dermatology, Ophthalmology, Otology, Genito-Urinary, Gynæcology, Diseases of the Nose and Throat, Orthopedics and Nervous Diseases.

Upon application a schedule will be furnished the student, from which he can choose enough work to completely fill the day from nine in the morning until four in the afternoon in this clinical work.

The laboratory courses which may be selected include Clinical Microscopy, Gross Pathology and Autopsies, whenever they can be obtained, Pharmacognosy and Pharmacy, Bacteriology, Chemistry and Histology. In addition to these clinics and laboratory courses, there will be recitation work one hour a week in each of the following subjects: Anatomy, Surgery, Materia Medica and Therapeutics, Practice of Medicine, Obstetrics and Gynæcology.

Students who have completed their first year only are advised to choose only laboratory courses and recitation work. Students who have completed their first and second years are advised to omit all work in the specialties, and choose courses in Physical Diagnosis or Minor Surgery in some dispensary, supplemented by recitations in General Medicine or General Surgery, or both.

Students who have finished their third year are considered well enough advanced to profit by the courses in the specialties, but are advised to take in addition a course in General Medicine.

Students who have completed their fourth year should take up systematically practical instruction in as many of the specialties as the schedule will permit. As these courses are taught by

physicians who have had large experience in their chosen line, and command abundant clinical material, they are excellent for post-graduate students who may wish to become familiar with the recent advances in any particular subject.

Each Clinical or Laboratory Course will cover a period of six weeks, with at least two lessons given weekly.

The Clinical Courses, unless otherwise specified, may begin at any time between May 14th and June 18th.

The Laboratory and Recitation Courses must begin on the dates specified, or as soon after May 14th as the classes can be organized.

The charge for each course will be.....$10.00.
[1] Registration fee..... 5.00.

Recitations.—(The recitations in each subject are understood to occupy one hour a week from May 14th until July 28th, or the same number of hours may be condensed into a shorter period at the option of the students and instructor.)

Materia Medica and Therapeutics, Practice of Medicine, Physiology.	One or more of these subjects may be taken with Dr. S. B. Ives. Hour according to the convenience of the majority of the class, between 9 A.M. and 1 P.M. (except Mondays).
Materia Medica and Therapeutics, Practice of Medicine.	One or more of these subjects may be taken with Dr. D. S. Byard. June 5–July 13 inclusive. Tuesdays and Thursdays before 1 P.M.
Anatomy, Surgery, Physiology.	One or more of these subjects can be taken with Dr. Hartwell, who prefers that the recitation in each subject should be two a week for six weeks, beginning May 14th. Any morning (but Monday) between 9 and 11 A.M., or Wednesday or Friday from 3 to 4 P.M.

[1] Cornell students are exempt from this fee.

Surgery.	Dr. B. T. Tilton. May 25–July 6, 2 hours a week. The course will cover the most important subjects in regional and operative Surgery.
Obstetrics, Gynæcology.	Dr. George G. Ward. One hour a week in each subject. Preferably 1 to 2 or 2 to 3 P.M. on Tuesday, Wednesday, Thursday or Friday, according to the convenience of the majority in the classes. If the classes in each subject are small they will be combined.
Medicine.	Dr. Wm. R. Williams. Recitations in Diseases of the Lungs, Heart and Abdominal Organs. One or two hours a week.
Chemistry.	See Laboratory Courses.
Anatomy.	Dr. W. F. Stone. Once a week from May 14th until July 28th, or twice a week for six weeks, as preferred, on Tuesdays 9–10 A.M., or Tuesdays and Thursdays 9–10 A.M.

LABORATORY COURSES.

Chemistry.—Dr. L. W. Riggs. The course will begin May 24th and continue until June 30th.

Any one or more of the following courses may be taken:

Recitations in General Mineral Chemistry, 3 hours weekly.

Recitations in Organic Chemistry, 3 hours weekly.

Laboratory work in Qualitative Analysis, 6 hours weekly.

Laboratory work in Clinical Chemistry and Toxicology, 6 hours weekly.

(Students taking these courses cannot be excused from any work of the curriculum of the Winter Session.)

Bacteriology.—Dr. B. H. Buxton. Mondays, Wednesdays

and Fridays, 2–4 P.M. Five weeks, commencing May 21st. There will be an Elementary Course, or an Advanced Course, if enough students desire it. Class limited to ten or twelve students.

The Elementary Course includes making media, plating out and taking cultures and the study of two or three of prenatal pathogenic organisms.

The Advanced Course consists of the examination of water, milk, soil and staining, by Gram's method and for flagella.

Pharmacodynamics.—Dr. Edmund P. Shelby. Mondays, Wednesdays, and Fridays from 1–3 P.M. This course will not be given unless ten students apply. The course will include the study of crude drugs, the methods of making pharmaceutical preparations, the laws of solubilities and incompatibilities.

Histology.—Dr. J. S. Ferguson. Mondays and Wednesdays 1–3 P.M. Unless ten or more students apply for this course, it will not be given. The work will consist of individual instruction, and can cover such portions as may be desirable for the individual student.

Clinical Microscopy.—Dr. C. N. B. Camac. Mondays and Fridays, 10–11.30 A.M. Thirty students can be accommodated. Following is a brief outline of the course :

BLOOD.—Technique of obtaining blood specimens ; normal constituents of blood ; blood formation in bone marrow ; corpuscle counting and hæmoglobin estimation ; technique of fixing and staining specimens ; diseased conditions determined by differential counting ; study of blood-serum diagnosis ; leucocytosis ; malarial and other blood parasites ; medico-legal value of blood stains.

SPUTUM.—Collection and examination of the gross specimen ; disinfection of sputum cups, etc.; specimens of sputum in asthma, pneumonoconiosis, tuberculosis, gangrene, and hemorrhage from the lungs, pneumonia, etc.; diphtheria and other bacilli.

GASTRIC CONTENTS.—Examination of vomitus ; administration of test meals ; method of obtaining and examining gastric contents; lavage.

Fæces.—Method of obtaining and examining; intestinal parasites and ova.

Urine.—Microscopic examination with reference to diagnosis; gonococci, tubercle bacilli, etc., seminal fluid in its medico-legal aspect, crystalline deposits.

Exudations and Transudations.—Ascitic and pleuritic effusions, cystic contents, vaginal discharges.

Each student is furnished typical specimens which he stains and studies at the demonstrations and preserves for future reference and comparison.

Gross Pathology.—Dr. Otto H. Schultze. Daily for one month at 11 A.M. The class is to be limited to ten students. Another will be formed if necessary. The course will cover pathological anatomy, autopsy technique, pathological diagnosis, visceral anatomy and relations, with special reference to clinical examinations and diagnosis.

Pathological Histology.—Dr. Chas. Norris. Daily from 2–4 P.M. The course begins about the fourth week in May and continues approximately for six weeks.

Surgical Diagnosis.—Dr. W. D. Bullard. Tuesday, Thursday and Saturday, 3–4.30 P.M.

The class is limited to six (6) students. The instruction covers the ordinary diagnosis and treatment of walking surgical cases, including fractures and infected wounds and such other material as may be encountered.

Dr. W. C. Gilley. Monday, Wednesday and Friday, or Tuesday, Thursday and Saturday, 9–11 A.M.

Minor Surgery and Bandaging, with special reference to the antiseptic treatment of emergency cases. Class limited to eight (8) students.

Dr. F. W. Gwyer. Tuesday and Friday, 1 P.M.; Saturday, 11 A.M. From May 14th to June 30th only.

The course includes surgical diagnosis and history taking, and is taught in the hospital wards. Those who take this course are excused from equal amount of section work of the third year next winter, and the course is thus of service in

gaining extra time during the third winter, and in preparing students for the better understanding and appreciation of surgical ward work, which is part of the regular winter curriculum. Limited to Cornell students who have completed their second year.

Dr. F. W. Gwyer. Surgical diagnosis, Tuesday, Friday, and Saturday, 2–4 P.M. This course is given in the surgical wards of a hospital and includes the diagnosis and treatment of all diseases classified as surgical.

Dr. Forbes Hawkes. Daily, 2–3 P.M. The classes are limited to ten students. The course consists of practical clinical instruction in minor surgery, surgical diagnosis, bandaging, the application of dressings, of splints, of plaster of Paris bandages, etc., and in the giving of anæsthetics, ether, chloroform, nitrous oxide, cocaine, etc. Cases of interest are also shown in the Gynæcological and Genito-Urinary divisions and their treatment followed. After the hour is over the students are often enabled to witness in the large operating pavilion the major operations, which may be done on those patients whose lesions have previously been diagnosed by them in the dispensary, and in this way the students keep in touch with their treatment and subsequent behavior.

Dr. W. F. Stone. Monday, Wednesday and Friday, 1–3 P.M. Class limited to ten students. The course consists in diagnosis and treatment of walking cases, bandaging, the application of splints, etc.

Dr. F. L. Taylor. Daily, 9.30–11.30 A.M. Class limited to eight men. The course includes fractures, minor operative surgery, surgical dressings, and bandaging.

Dr. B. T. Tilton. Monday, Wednesday and Friday, 2–4 P.M. Class limited to six students. The course consists of minor surgery, including bandaging and diagnosis.

Dr. G. Woolsey. Tuesday, Wednesday and Friday, or Tuesday, Thursday and Friday, 11.30–12.30 P.M., from June 1st to July 28th. Class limited to ten students.

The course consists of ward visits with the attending surgeon

and staff, practical instruction in diagnosis, treatment, after-treatment, and dressing of wounds and surgical cases. Once a week, or oftener, cases are operated upon during the hour. Practical instruction in anæsthesia, asepsis, and minor operations. Major operations witnessed and course and after-treatment of cases watched.

Medical Diagnosis. — Dr. Russell Bellamy. Monday, Wednesday and Friday, 12–1 P.M. The class is limited to fifteen (15) students. The course consists of physical and clinical diagnosis, the demonstration of the most important symptoms, the coexistence of diseases, and study of special complications and the period of convalescence. The most advanced therapeutic measures will be shown and the newest remedies will be tested and considered.

Dr. R. E. Brown. Monday, Wednesday, Friday, 12.30–2 P.M., or Tuesday, Thursday and Saturday at the same hour. The course covers the subject of general medical diagnosis, including the study of physical signs. The student is allowed to prescribe under the direction of the instructor.

Dr. Warren Coleman. Monday, Wednesday and Friday, 1–2 P.M. The course is limited to five (5) students. It will begin July 1st and continue until July 28th. The instruction is given in a hospital ward, and includes the care, diagnosis and treatment of all diseases classified as medical.

Dr. S. B. Ives. Tuesday, Thursday and Saturday, 3.30–4 P.M. The course is limited to six (6) students, and includes instruction in general medical diagnosis, the proper methods of making physical examination, taking of histories, and the treatment of patients in a dispensary.

Dr. E. P. Solley. Monday, Wednesday and Friday afternoons at 2 P.M., from May 14th to June 22d. Class limited to six students. Also Tuesday, Thursday and Saturday at 10.30 A.M., from May 15th to June 23d. Class limited to six students. The course includes the treatment of medical conditions, together with diseases of the Throat and Nose, Ear, Skin, Nervous System, and Children.

Dr. J. P. Thornley. Tuesday, Thursday and Saturday, 1.30–4 P.M. Class limited to ten students. The course includes instruction in history taking, physical diagnosis, with quiz on these two subjects. Students will also be expected to suggest and discuss treatment of cases.

Dermatology.—Dr. Thurston G. Lusk. Tuesday, Thursday and Saturday, 2–4 P.M. Class limited to ten or twelve students. The course consists of presentation of cases, diagnosis, differential diagnosis, and treatment of diseases of the skin.

Dr. Henry H. Whitehouse. Tuesday, Thursday and Saturday, 2–3 P.M., six to eight students. The course covers the study of diseases of the skin and syphilis, special attention being paid to etiology, differential diagnosis, microscopic demonstration of fungus and parasites.

Genito-Urinary.—Dr. Follen Cabot. Tuesday, Thursday and Saturday, 12.30–2 P.M. Class limited to six students. The course covers minor operations in genito-urinary surgery, with the care and treatment of venereal diseases. Ample opportunity is given for every student to see and treat these cases by himself under competent direction.

Genito-Urinary Diseases.—Dr. B. T. Tilton. Tuesday and Friday evenings, 8–9.30 P.M. Class limited to six students. Course consists of diagnosis and treatment of venereal diseases.

Dr. M. J. Echeveria. Monday, Tuesday, Thursday, Friday, 9–11 A.M. Class limited to four students. Clinical instruction in the diagnosis and treatment of genito-urinary diseases, use of simple instruments and minor operations.

A second course for advanced students is offered by the same instructor in the use of the endoscope and cystoscope. Three days each week.

Dr. George K. Swinburne. Daily from 9–1 P.M., class limited to four students. The course includes the method of diagnosis and the use of instruments in venereal and genito-urinary diseases.

Gynæcology.—Dr. Chas. C. Barrows. Monday, Wednesday and Friday, 10–11 A.M. Class limited to twelve students. The course includes gynæcological examinations, examinations of

the female bladder and rectum. Diagnosis, and treatment of morbid conditions of the external genitalia uterus and uterine adnexa, bladder and rectum, and operative treatment of morbid conditions of the external genitalia, uterus and uterine adnexa.

Dr. E. O. Parker. Daily from 12–1 P.M. and 2–3 P.M. Two classes daily, limited each to two students. The course covers general clinical instruction in the treatment of ordinary gynæcological cases as encountered in the dispensary. Special attention will be paid to endometritis, tubal troubles, and lacerations. Some attention will also be given to venereal diseases.

Laryngology. — Dr. Newcomb. Tuesday, Thursday and Saturday, 2 P.M. The class is limited to six students. (Unless three apply for the course, it will not be given.) The course covers technical use of examining instruments, methods of examination, translumination, etc., exhibition of patients covering the usual nose and throat affections ; methods of treatment to be put into practical employment by the students.

Neurology. — Dr. Joseph Fraenkel. Tuesday, Thursday and Saturday, 1.30–2.30 P.M. The class is limited to about twenty students. The course consists of clinical lectures on nervous diseases, embracing etiology, diagnosis, and treatment.

Dr. M. G. Schlapp. Monday, Wednesday and Friday, 2–3 P.M. Five students. Neurology and Electro-Therapeutics as met with in dispensary practice.

Obstetric Clinic and Diagnosis Class.— Dr. J. Clifton Edgar. Tuesday and Thursday, during June, at 4 P. M. The course includes the following clinical demonstrations at the Mothers' and Babies' Hospital. 1. The changes produced by pregnancy. 2. The symptoms and signs and diagnosis of pregnancy. The obstetric examination. 3. Instrumental and manual pelvimetry. The normal and deformed pelvis. 4. The hygiene and disorders of pregnancy. Albuminuria. 5. The management of labor, asepsis and antisepsis. Preparation for labor examinations — the stages. Abdominal binder. Vulva dressing. Care of infant. 6. Changes in and care of mother and infant for the first two weeks following labor. 7. Fever in mother and

infant after labor of septic and non-septic origin. 8. Infant feeding. Weight charts of infants. Ophthalmia. Septic umbilicus, etc.

Otology.— Dr. F. M. Stephens. Tuesday, Thursday and Saturday, 3–4 P.M. Class limited to six students. Opportunity for examination and treatment of patients. Instruction in functional testing, use of eustachian catheter, etc.; also opportunity to witness all major and minor operations connected with diseases of ear, including intracranial complications.

Dr. Earle Conner. Monday, Wednesday and Friday, 11–12 M. Class limited to four students. The course consists of examination, functional testing, and clinical treatment of patients under the direction of the instructor.

Pediatrics.— Dr. Walter A. Dunckel. Monday, Wednesday and Friday, or Tuesday, Thursday and Saturday, 11 A. M. to 1 P.M. The class is limited to four students. The course will embrace instruction in the methods of making physical examinations, diagnosis and treatment and artificial feeding. The technique of gastric and intestinal irrigation, and operations for the removal of tonsils and adenoid growths, will be shown in the line of treatment. The aim of the course is to enable the student to acquire a direct knowledge of the cases, and by keeping his records of the more important ones, to make his observations of value to him. The service is a very active one, and usually affords a fair number of the acute infectious disorders, including the exanthemata.

Dr. Wm. Shannon. Monday, Wednesday and Friday, 1–2 P.M. The class is limited to ten students. The course includes medical diagnosis and treatment, instruction in physical diagnosis of diseases of the chest, and artificial feeding of infants.

Post-Graduate Course in Operative Surgery.—A course in operative surgery will be offered to graduates in medicine, beginning about June 1, 1900. (This course can be taken at any time during the year except during July, August and September, by previous arrangement with the office.) The operative material is sufficient, and will be specially selected and prepared. The course, as arranged, will be very complete, covering

about one hundred and fifty different operations, and one hundred and fifty or more duplicates, making a possible total for each class of over three hundred operative procedures. The operations have been chosen with two objects in view: To enable those taking the course to become familiar with the surgical anatomy of operative regions of the body; and to rehearse not only the standard operations, such as ligations, amputations, etc., but also all of the more complicated and recently devised operations. To meet the wishes of those desiring to take the course the amount of work and time required, and the character of the operations performed, will in a great measure be optional with the student. So that the individual student may give one or several weeks' time (two hours a day), and the student may perform fifteen or twenty selected operations, or those of the entire schedule. The above plan necessitates a sliding scale of fees for tuition, which will vary from a minimum of Twenty-five Dollars, depending on the amount and character of the work involved, and the number of students in a class. The work is to be done under the supervision of the Professor of Operative Surgery, assisted by fully qualified instructors.

Undergraduates will not be admitted to these courses except they are entering their senior year, and present satisfactory evidence of having attended an undergraduate operative surgery course. For list of operations and further information apply to the Secretary.

Ophthalmology.—Dr. Colman W. Cutler. Monday, Wednesday and Friday, 2 P.M. The instruction includes use of the ophthalmoscope in testing for refraction and clinical diagnosis and treatment.

Dr. Robert G. Reese. Monday, Wednesday and Friday, 2 P.M. Men or women. Class limited to six students. The course includes ophthalmoscopy, refraction and clinical ophthalmology with operations.

For further information address,

JOHN ROGERS, Jr., M.D., *Secretary*,
Cornell University Medical College,
425 East 26th Street, New York.

CORNELL UNIVERSITY MEDICAL COLLEGE

IN NEW YORK CITY

ANNOUNCEMENT

1900–1901

NEW YORK CITY

PUBLISHED BY THE UNIVERSITY

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* Term of office (5 years) expires in 1900, the next group of six in 1901, etc.
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The President of the University; the Dean of the Medical Faculty; three Trustees elected by the Board; and two Professors elected by the Faculty (one each year) form the Council of the Medical College, and, subject to the control of the Board of Trustees of the University, it is charged with the business management of the College and the Dispensary. The present Council is constituted as follows:

Jacob Gould Schurman, President of the University and Chairman *ex-officio* of the Council.

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H. R. Ickelheimer,
} of the Board of Trustees.

L. A. Stimson,
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} of the Faculty.

J. Thorn Willson, *Secretary.*

CALENDAR.

1900-1901.

October 2, Tuesday—College opens.
November 6, Tuesday—Election Day. Legal holiday
November 29, Thursday, to 9 A.M., December 3, Monday—Thanksgiving recess.
December 21, 1900, Friday, to 9 A.M., Wednesday, January 2, 1901—Christmas recess.

1901.

February 22, Friday—Washington's Birthday. Legal holiday.
April 5, Good Friday.
May, first and second week—Examinations for undergraduates.
May 20, Monday—Final examinations for graduation begins.
June 5, Wednesday—Commencement.

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JOHN ROGERS, JR., M.D.,
Secretary of the Faculty.

J. THORN WILLSON,
Clerk of the College.
First Avenue, 27th and 28th Streets.

COLLEGE BUILDING.*

THE Medical Department of Cornell University was established in 1898. This undertaking, which had been contemplated by the Trustees for several years, was made possible by the gift to the University of a large and fully equipped building specially planned for medical instruction, and by the bestowal of a sufficient endowment for the maintenance of a Medical School.

In order that the profession may have some idea of the facilities for teaching which the School offers, an outline of this building, including its interior arrangements, is presented here.

It is designed in a severe style of Renaissance architecture, and is constructed of Indiana limestone and red brick. FIVE stories high it fronts on First Avenue, and faces Bellevue Hospital. It covers all the space bounded by First Avenue between 27th and 28th Streets, extending back 100 feet, and affords a floor area of about 200 by 100 feet (light and air space excepted) for each story.

The building comprises a Medical School and a Dispensary, each with a main entrance on First Avenue and is arranged as follows:

The basement is commodious, well lighted and ventilated and contains the engines, boilers, dynamos and ventilating machinery; the refrigerating and cold-storage plant, with the injecting and freezing rooms; a large room with lockers and another for bicycles. Storerooms, including one for drugs, four rooms, including a small theatre and a workshop, for Orthopædic surgery, toilet rooms and lavatories and several rooms for the janitor of the building are also found here. On the basement level, but outside of the building, is a large incinerating furnace for consuming all the refuse from the College.

* See frontispiece and floor plans.

to the doors and interior of the windows ensure cleanliness. Special attention has also been paid to the problems of refrigeration, lighting, heating and ventilation, so that every part of the structure can be easily kept at all times in an agreeable and sanitary condition.

In conjunction with this building the Loomis Laboratory will be employed in the manner set forth below.

LOOMIS LABORATORY. (Founded 1886.)

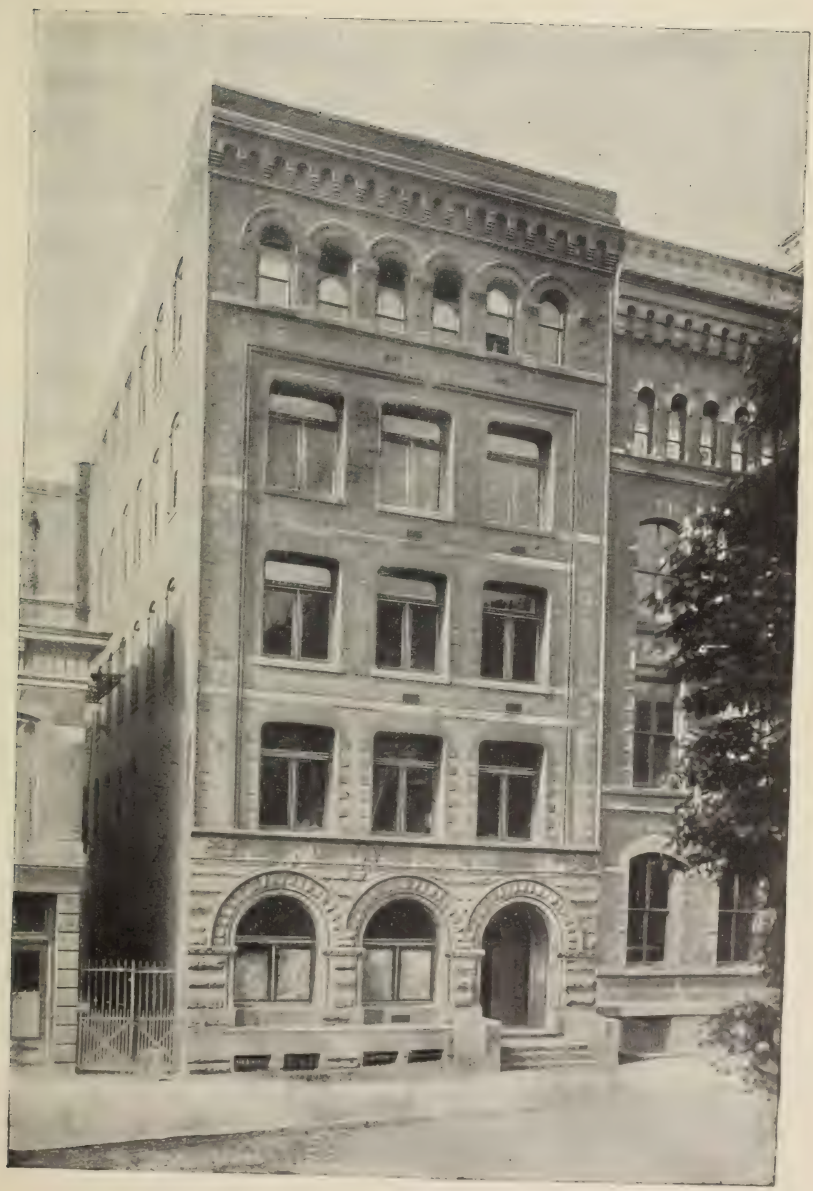
IT is intended that this laboratory shall not only serve the purposes of undergraduate instruction in connection with the laboratories in the College building in such subjects as can be best taught in a laboratory, but also that it shall be especially available to graduates in medicine who may desire to pursue further study or original research in the various departments of laboratory investigation.

The building is five stories in height, fire-proof, with concrete floors, thoroughly ventilated, and provided with an elevator, steam heat, gas and an electric-light plant. It is lighted by windows on either side.

Laboratories of Materia Medica and Therapeutics occupy the first and second floors. The collection of drugs is complete, and includes mounted specimens of most of the botanical plants used as medicines. There is a large collection of apparatus for the practical and experimental study of Pharmacology.

The second floor is divided into a general laboratory and a laboratory of special research. The general laboratory has tables for fifty students, each furnished with running water, gas, electric lights and a special ventilating plant.

The laboratory for advanced work in Physiology occupies the third floor and is well equipped with apparatus for original research; the collection of models for the demonstration of physiological processes is as complete as any in the country. Connected with the laboratory is a large room for section demonstrations.



THE LOOMIS LABORATORY

The Pathological Department occupies the entire fourth floor and on this floor is the pathological museum, private rooms for the instructors and advanced workers, thoroughly equipped photographic rooms, workshop and a freezing plant for the preservation of pathological specimens. There is ample supply of material for study in all departments of pathology and bacteriology.

The fifth floor contains the Bacteriological Laboratories in front and in the rear a large room used by the classes in histology and pathology.

The position of this general class room above the surrounding buildings, its equipment with suitable tables, necessary reagents, microscopes, and accessories for class work, provides the best accommodation possible for laboratory instruction. It is abundantly lighted upon three sides, is well ventilated, is fitted with separate lockers for each student, and has a seating capacity for one hundred students.

CLINICAL FACILITIES.

THE Medical Department of Cornell University has been established in New York in order to secure those advantages for clinical intruction which are to be found only in large cities. The Faculty of the Medical College hold appointments in the hospitals and dispensaries in the city and are enabled to utilize for teaching purposes the large quantity and variety of clinical material of ten of the great City Hospitals, viz.:

Bellevue Hospital—26th Street and East River.

This hospital has 900 beds, and receives 10,000 patients annually. In this building is an amphitheatre capable of seating 300 students, and also a number of small, newly built operating theatres, where section demonstrations in surgery and gynæcology are made before the class. Connected with the hospital is a hydropathic establishment where students are shown the practical applications of bath, douches, massage, etc.

The following clinics are held during the Session:

Obstetrics and Gynæcology—Monday, 2 P.M.
Professor POLK.
Medicine—Tuesday and Friday, 3 P.M.
Professors LOOMIS and THOMPSON.
Surgery—Wednesday and Thursday, 3 P.M.
Professors STIMSON, WOOLSEY, DENNIS and GWYER
Genito-Urinary—Wednesday, 3 P.M., for half the term.
Professor ALEXANDER.
Nervous Diseases—Friday, 4 P.M.
Professor DANA.

The Out-Patient Department of Bellevue Hospital treats over 50,000 patients annually. A large proportion of this clinical material is utilized for the purpose of section teaching by members of the Faculty who hold positions in the Dispensary.

City Hospital (formerly Charity Hospital)—Blackwell's Island, East River. To reach this institution the steamer should be taken at the foot of East 26th Street.

This hospital has a capacity of 1000 beds. It offers special advantages for the study of venereal and genito-urinary diseases.

New York Hospital—15th Street, between Fifth and Sixth Avenues.

This is one of the most thoroughly equipped hospitals in the city and has connected with it a large Out-Patient Department.

Clinical instruction is given by Professors Stimson, Loomis, Murray, Bolton and Johnson.

Presbyterian Hospital—Madison Avenue and 70th Street.

This is a large general hospital of 350 beds and includes extensive and varied medical and surgical service. Clinical instruction is given by Professor Thompson.

Mothers' and Babies' Hospital—Lexington Avenue and 52d Street.

This modern hospital has 73 beds devoted to maternity cases, and, in addition, a rapidly growing out-patient obstetric service in the tenement-house district. Students of the third and fourth year of the Cornell University Medical College are admitted as internes in this hospital for a period of two weeks or more.

During this time the students are boarded and lodged in the hospital building and receive practical bedside instruction under the supervision of Professor Edgar and the hospital staff.

Willard Parker Hospital — Foot of East 16th Street.

This hospital is in charge of the Board of Health, New York City, and offers unrivalled opportunities for the study of Contagious diseases — such as diphtheria, scarlet fever, measles, smallpox and typhus fever.

Professor Winters gives bedside instruction to small sections of the fourth-year class in this hospital.

New York Skin and Cancer Hospital — 19th Street and Second Avenue.

This hospital affords accommodation for the treatment of a large number of patients afflicted with cancer and skin diseases. Section instruction in dermatology is conducted here by Professor Elliot and his assistants.

St. Francis's Hospital — 609 Fifth Street.

A general hospital with a capacity of 230 beds. Section instruction here is under the charge of Professor Kammerer.

St. Vincent's Hospital — 195 West 11th Street.

This is a general hospital containing nearly 200 beds.

Section teaching and clinics are given here by Professor Dennis and Dr. Aspell.

New York Eye and Ear Infirmary—Second Avenue, corner 13th Street.

This hospital is devoted to the treatment of eye, ear and throat diseases.

Clinical instruction is given in this institution by Professors Bull and Bacon, aided by a corps of assistants.

Manhattan Eye and Ear Hospital — 103 Park Avenue.

This is one of the largest institutions for the treatment of this class of diseases in the city. Professor Knight and his assistants give instruction in laryngology on Saturdays.

In addition to these hospitals, the teaching corps of the Medical Faculty is represented upon the visiting staffs of many other

hospitals and dispensaries in the city, where the Cornell students are invited to attend clinics. Among these are:

The Maternity Hospital,
Gouverneur Hospital,
Harlem Hospital,
Almshouse and Workhouse Hospital,
Emergency Hospital,
Randall's Island Hospital,
Fordham Hospital,
Columbus Hospital,
Manhattan State Hospital.

REQUIREMENTS FOR ADMISSION.

The Medical Department of Cornell University is open to all who have a "medical-student certificate." The laws of New York State require of the prospective student of medicine a preliminary education equivalent to that obtainable in a four-years course in any of the public high schools recognized by the Regents as maintaining a satisfactory standard. Those who cannot present formal evidence of at least this amount of preliminary education must pass the examinations conducted by the State authorities at regular intervals throughout the year. The medical-student certificate thus earned by examination or by a high school, college, or university diploma must be filed with the secretary at the time of registration. As the certificate can be obtained with very little or no knowledge of subjects which bear directly upon the study of medicine it is earnestly recommended that, before beginning the professional course, as thorough an understanding as possible be acquired of English, Latin, algebra, geometry, physics, inorganic chemistry and physiology. This is obtainable to a certain extent in many high schools and is encouraged by the Regents, who grant a medical students' diploma for a sufficient amount of work so distributed as to be preparatory for subsequent advanced technical studies. As an academic college

course offers far greater advantages in this respect, all who can are urged to take the Freshman and Sophomore years in the Academic Department of the University proper at Ithaca. After the completion of these years the student may elect the work of the first two years of the medical department, which may be pursued at Ithaca, and at their expiration finish the remaining two years of the medical course in New York and thus obtain both the B.A. and M.D. degrees in six years. This is possible because the first two years of the medical course in New York is offered in duplicate at the University in Ithaca. Women must take these years in the medical department in Ithaca, where special accommodations are provided for them in the Sage College. Women are received at the medical department in New York City in the third and fourth years only.

REGENTS' ENTRANCE EXAMINATIONS AND CERTIFICATES.

The following requirements for admission to candidacy for a degree in *any medical college in New York State* were established by laws passed by the Legislature, to take effect March 21, 1896.

MEDICAL-STUDENT CERTIFICATE.

Each student who matriculates with the intention of becoming a candidate for the degree of doctor in medicine, whether he comes to New York to begin or continue the study of medicine, must file with the Dean of the College a medical-student certificate issued by the Regents of the University of the State of New York.

This certificate is granted according to the following extract of the Laws of 1896, ch. iii.:

To provide for the preliminary education of medical students:

The degree of bachelor or doctor of medicine shall not be conferred in this State before the candidate has filed with the institution conferring it the certificate of the Regents that before beginning the first annual medical course

counted toward the degree (unless matriculated conditionally as hereinafter specified), he had either graduated from a registered college or satisfactorily completed a full course in a registered academy or high school; or had a preliminary education considered and accepted by the Regents as fully equivalent; or held a Regents' medical-student certificate, granted before this act took effect; or had passed Regents' examinations as hereinafter provided. A medical school may matriculate conditionally a student deficient in not more than one year's academic work or twelve counts of the preliminary education requirements, provided the name and deficiency of each student so matriculated be filed at the Regents' office within three months after matriculation, and that the deficiency be made up before the student begins the second annual medical course counted toward the degree. Students who had matriculated in a New York medical school before June 5, 1890, and students who had matriculated in a New York medical school before May 13, 1895, as having entered before June 5, 1890, on the prescribed three years' study of medicine, shall be exempt from this preliminary-education requirement.

A medical-student certificate may be earned without notice to the Regents of the conditional matriculation either before the student begins the second annual medical course counted toward the degree or two years before the date of the degree for matriculants in any registered medical school, in the four cases following:

1. For matriculants prior to May 9, 1893, for any twenty counts, allowing ten for the preliminaries, not including reading and writing.

2. For matriculants prior to May 13, 1895, for arithmetic, elementary English, geography, spelling, United States history, English composition and physics, or any fifty counts, allowing fourteen for the preliminaries.

3. For matriculants prior to January 1, 1896, for any twelve academic counts.

4. For matriculants prior to January 1, 1897, for any twenty-four academic counts.

But all matriculants, after January 1, 1897, must secure forty-eight academic counts, or their full equivalent, before beginning the first annual medical course counted toward the degree, unless admitted conditionally, as hereinbefore specified, when the deficiency must be made up before the student begins the second annual medical course counted toward the degree.

This act shall take effect March 21, 1896, except that the increase in the required course of medical study from three to four years shall take effect January 1, 1898, and shall not apply to students who matriculated before that date and who receive the degree of doctor of medicine before January 1, 1902.

NOTES ON THE LAW.

1. For matriculants prior to January 1, 1897, medical schools are not required to furnish notice of conditional matriculation, and such students may make up

the full requirement at any time before beginning the second annual course counted toward the degree, or two years before the date of the degree.

All matriculants after January 1, 1897, must secure forty-eight academic counts or their full equivalent before beginning the first annual course counted toward the degree, unless admitted conditionally, in which case the deficiency is not to exceed twelve academic counts and must be made up before the student begins the second annual course counted toward the degree.

2. The Regents will accept as fully equivalent to the required academic course any one of the following:

(*a*) A certificate of having successfully completed at least one full year's course of study in the collegiate department of any college or university registered by the Regents as maintaining a satisfactory standard.

Certificates should be issued in due form by the president, dean or principal of the institution; and should be signed under seal or acknowledged before a notary, unless the institution is in the University of the State of New York or the signature of the officer issuing is well known in the Regent's office.

(*b*) A certificate of having passed in a registered institution examinations equivalent to the full collegiate course of the freshman year or to a completed academic course.

Three full academic years of satisfactory work may be accepted as a high-school course till August 1, 1896, when four full academic years will be required.

(*c*) Regents' pass-cards for any forty-eight academic counts or any Regents' diploma.

(*d*) A certificate of graduation from any registered gymnasium in Germany, Austria, or Russia.

(*e*) A certificate of successful completion of a course of five years in a registered Italian *ginnasio* and three years in a *liceo*.

(*f*) The bachelor's degree in arts or science, or substantial equivalents from any registered institution in France or Spain.

(*g*) Any credential from a registered institution or from the government in any foreign state or country which represents the completion of a course of study equivalent to graduation from a registered New York high school or academy, or from a registered Prussian gymnasium.

3. March 22, 1898, the Regents approved the following modifications in requirements for medical student certificates:

(*a*) **Partial Equivalents.** Evidence of completion in a registered school of one or more years of satisfactory high-school work, and Regents' examinations in subjects representing the balance of the required four-year course (any 12, 24, or 36 additional counts).

(*b*) **Cumulative Credit.** Regent's examinations in the second or third year of any language course will be accepted as including the preceding years in those courses.

(*c*) **Date of Certificate.** Candidates unable to offer certificates of the required academic work in a registered institution may present evidence to the Regents that they had the required preliminary education before beginning the second course counted toward the degree, and may on passing Regents' examinations receive their certificates as of the date when the preliminary work was completed.

4. Other equivalent credentials from other States and countries besides those specified in the law, which may be accepted by the Regents in place of an examination, may be ascertained by written application to Examination Department, University of the State of New York, Albany, N. Y.

5. Any student who has matriculated under the legal requirements in regard to Regents' examinations, existing at the time of matriculation, will not require another certificate whenever he may be graduated.

6. If students unable to offer equivalents come from out of the State, they may enter the second course counted toward the degree, provided that at the preceding June or September examination they meet the preliminary requirement.

Medical-student certificates issued on "equivalents" without examination, may be obtained at any time before the degree of M.D. is conferred, provided that the course of study for which the certificate is issued was completed within the prescribed time.

EXAMINATIONS UNDER THE ACT.

Students who do not obtain a medical-student certificate without examination must pass an examination on the subjects required by the Regents. These examinations are held entirely under the charge of the Regents in New York, and in many other places throughout the State, on the following dates:

CALENDAR OF REGENTS' EXAMINATIONS.

YEAR.	JAN.	MARCH.	JUNE.	SEPT.
1900.....	22–26	28–30	11–15	25–27

NOTE.—September examinations will be held in New York, Albany, Syracuse and Buffalo, for law and medical students only. The other examinations are held in New York and in numerous academies and high schools throughout the State for professional and academic students.

EXTRACTS FROM REGENTS' RULES.

Order of Studies.—There is no restriction in the order in which studies may be taken. Advanced students who may come from other States, or who,

for other reasons, have not passed in elementary subjects, may take them at any time: *e. g.*, arithmetic after algebra or geometry; English composition after rhetoric, etc.

Time Limit.—There is no limit of time, but all credentials issued by the University are good till cancelled for cause. Studies necessary to obtain any credential may be passed at different examinations.

Seventy-five per cent, of correct answers is required in all subjects.

Answer papers will be reviewed in the Regents' office, and all papers below standard will be returned to the candidates. For those accepted, pass-cards will be issued.

Pass-Cards.—A Regents' pass-card is not limited in time; therefore it is not necessary to pass any Regents' examination a second time.

Medical-Student Certificate.—When all requirements are fulfilled, the Regents grant a medical-student certificate.

On receiving this certificate, the candidate must send it to the secretary or recording officer of the university or college at which he intends to study medicine.

N. B.—*Candidates for medical students' examination should send notice at least ten days in advance, stating at what time and in what studies they wish to be examined*, that required desk-room may be provided at the most convenient place.

Candidates who fail to send this advance notice will be admitted only so far as there are unoccupied seats.

MEDICAL-STUDENT CERTIFICATES WITHOUT EXAMINATIONS.

Students who may be entitled to the medical-student certificates on equivalents (see notes on the law, 2, 3, 4, 5 and 6) are advised to present or forward their credentials to the Secretary of the College, who will send them to the Regents for examination and approval. They will be returned as soon as verified, and, if accepted, the proper certificate will be sent with them. The Secretary of the College will furnish, on application, blank forms of collegiate, academic, or high-school certificates.

Other equivalent credentials from foreign countries or from other States may be accepted by the Regents at their discretion.

The Secretary will furnish full information on request.

DIRECTIONS FOR OBTAINING A REGENTS' MEDICAL-STUDENT CERTIFICATE.

1. Give the full name of the applicant, the exact name of the institution and of the department attended, an accurate description of the course pursued using the same terms that are given in the official announcement, circular or catalogue of the institution.

Send an official announcement, circular or catalogue of the institution, showing:

(*a*) Requirements for admission, *i.e.*, subjects and years given to their completion.

(*b*) Requirements for graduation in each course, including subjects pursued and time devoted to each.

JAMES RUSSELL PARSONS, JR.,
Director of College Dept.

Regents' Office, Albany, N. Y.
15 April, 1898.

REGISTRATION AND MATRICULATION.

Students on entering the College will be required to register and pay the registration fee of $5. The payment of this fee is required only once. They will receive a receipt which will be exchanged for a certificate of full or conditional matriculation when they shall have complied with the Regents' requirements for such matriculation; but students who have already been matriculated at a medical college in the State of New York, according to the Regents' requirements, and those who already hold a medical-student certificate, will be matriculated immediately on registration.

THE ADMISSION OF STUDENTS FROM OTHER ACCREDITED MEDICAL COLLEGES.

ADMISSION TO ADVANCED STANDING.

Graduates of Cornell, Yale, Harvard, Princeton, University of Pennsylvania, Johns Hopkins, Columbia, University of Michigan and other accredited universities, who have taken either a preparatory medical course or special work in organic or inorganic chemistry, physics or physiology, will be allowed credit for the work which they have done, and may be excused from the recitations upon these subjects, and from the exercises of the chemical laboratory in the first year, provided they pass examinations before the professors of these departments, and provided they give to dissection and electives as described on pages 35–37, in

the various departments, a full equivalent in hours to the subject they may have passed by examination.

Students who have had training in microscopical technique or in histology will be given advanced work in the histological laboratory.

Students who have already attended the requisite number of courses in other accredited medical colleges may be admitted to advanced standing in any one of the years of the four years' course of the Cornell University Medical College by presenting a Regents' medical students' certificate and by passing examinations in the subjects described on pages 79–82 as completed, in the year or years previous to that which the student desires to enter. The applicant must also present certificates of having satisfactorily completed laboratory courses equivalent to those required of the Cornell medical students in the year or years previous to that to be entered.

According to the law of the Regents of the State of New York, no student from an unregistered Medical School may obtain a degree on less than two years of medical study in this State.

HOLDERS OF SPECIAL DEGREES.

Graduates of pharmacy or of dental or veterinary or other professional schools, who can present satisfactory evidence of having completed any course of study required in any year by this College, may upon passing a satisfactory examination be excused from attendance upon instruction in that subject, provided they take equivalent additional work in other branches.

ADMISSION TO SPECIAL DEGREES.

Graduates in medicine, or students who desire to pursue a special course without graduation, are admitted to registration as special students without Regents' or other preliminary examination. Such special courses do not count in any way as part of the four years' course required of candidates for the degree of doctor in medicine. Further information regarding such courses,

fees, etc., may be obtained by addressing the Secretary of the Cornell University Medical College, First Avenue, 27th to 28th Streets, New York.

NEW YORK STATE SCHOLARSHIPS.

Under the law of the State the Superintendent of Public Instruction is empowered to award annually a number of free scholarships in Cornell University equal to the number of Assembly Districts in the State. These scholarships entitle the holder to free tuition for four years in any department of Cornell University. They are awarded on examination to candidates from the general Assembly Districts "in consideration of their superior ability and as a reward for superior scholarship in the academies and public schools of this State."

For particulars in regard to these scholarships, application should be made to the Superintendent of Public Instruction at Albany.

Holders of State scholarships are notified that failure to register before the close of registration day involves the severance of their connection with the University and consequently the forfeiture of their scholarships. The President of the University is required by law to send immediate notice of such vacancies to the Superintendent of Public Instruction and the Superintendent fills vacancies forthwith.

UNIVERSITY UNDERGRADUATE SCHOLARSHIPS.

Pursuant to the action of the Trustees, at a special examination held at Ithaca, September 25th to 29th, 1900, at the beginning of the freshman year, eighteen scholarships of the annual value of $200 each will be annually thrown open to competition for all members of the freshman class who are registered in courses leading to first degree.

Students of high ability from the State of New York will have the additional advantage of being able to secure State scholarships, as there is nothing in the University statutes to prevent a

student from holding both a State scholarship and a University scholarship.

These scholarships will be given to those who on examination shall average the highest in any three of the following groups, always including group (*a*). Previous to entering this competitive examination, however, candidates are required to pass satisfactorily the regular entrance examination in English at the University. *School certificates*, *Regents' diplomas and normal school diplomas* are not accepted in place of this English examination.

(*a*) Arithmetic, and algebra through quadratic equations.

(*b*) Plane and solid geometry, advanced algebra, plain and spherical trigonometry.

(*c*) Greek.

(*d*) Latin.

(*e*) French.

(*f*) German.

For further information in regard to the scholarships see the Register of Cornell University.

GENERAL STATEMENT OF THE PLAN OF INSTRUCTION.

THE chief features in the scheme of instruction are extended laboratory training in all the subsidiary branches, daily recitations from standard text-books, clinical teaching in dispensaries and at the bedside in hospitals, and enough didactic lectures to make clear the general principles and conflicting theories in the practice of medicine and surgery. All students in any one class advance simultaneously in the various subjects and no section or group works apart from any other, thereby losing the opportunity to appreciate the relationship of the different matters which at any given time may be under discussion. Allowance, however, has been made for those who through natural endowments or superior energy or previous education can outstrip their less fortunate fellows. A careful record is kept of the attendance and character of the work of every student, and by this means at the end of the year each is placed in the section to which this record entitles him. A system of electives in clinical, laboratory, and recitation work is also provided, which it is the aim of the Faculty to enlarge as opportunities arise. A student is required to master all the subjects taught in any given year before being allowed to advance to the next, as the knowledge acquired in each year is necessary for a proper understanding of that which follows. Examinations are held at the end of each session; a failure to pass not more than two subjects, one of which at least must be a laboratory subject, is allowed in the spring, but every subject must be satisfactorily passed at the beginning of the next ensuing college year, or the applicant will be compelled to repeat the work of the preceding year. The following is a statement of the curriculum in each of the four annual sessions necessary to

obtain the degree of M.D., and attention is called to the careful arrangement of the instruction in time and correlation in subject matter so as to provide for a proper understanding and assimilation of the knowledge imparted in the different departments.

The essential feature of the entire system is the division of the classes of the several years into small sections for recitations, demonstrations, laboratory exercises, dispensary visitation and ward work in the hospitals.

The first year is devoted to anatomy, several consecutive uninterrupted hours being provided for dissection—embryology, normal histology, chemistry, and physics. The gross anatomy of the thoracic, abdominal, and pelvic viscera is demonstrated in outline in the early weeks of the session in anticipation of the examination of these organs in the histological laboratory. At the same time the department of Physiology presents for consideration the cell, the blood, the circulation, respiration, digestion, absorption, secretion and excretion in the order named. Thus the study of gross and histological anatomy and physiology advance together and in correlation with each other.

The general principles of mechanics, hydrostatics, optics, electricity, heat and acoustics, and their application to medicine, are taught in lectures illustrated by experiments. Inorganic chemistry is studied in the laboratory throughout the year. The class is divided into small sections, each of which must attend daily one or more recitation exercises in anatomy, histology, physiology and chemistry. These follow as closely as possible the practical work.

Students who have had the advantage of a thorough preliminary education in Physics and Chemistry before entering the medical school, after satisfactorily demonstrating to the professor in charge of this department by examination or otherwise, that they are familiar with the work of the first year, may be excused from attendance upon physics and chemistry. In place of these subjects they must elect at least one of the following courses given

in the second year—namely, laboratory pharmacology, or physiological chemistry, or bacteriology.

During the second year anatomy, physiology and chemistry are completed, except as they are reviewed in recitations during the fourth year preparatory for the State examinations, and the study in text-books of medicine, surgery, obstetrics and pathology is begun. The gross anatomy of the organs of special sense, and then that of the nervous system, are taught at the outset of the year by demonstrations to small groups of students. The demonstration of these organs is followed as closely as possible by the study of them in the histological laboratory during the first half of the session. The lectures and recitations in physiology follow the same course and being antedated by the study of the gross and histological aspects of the parts under discussion are capable of easy comprehension. Organic and physiological chemistry is studied in the laboratory and by lectures and recitations throughout the year. At the same time a laboratory course in pharmacology is pursued, familiarizing the student with the physical and chemical properties of drugs. Bacteriology is begun, the student commencing with the preparation and care of media and the recognition of the gross and microscopical characteristics of micro-organisms.

During the first few weeks of the term lectures are delivered upon the general principles of pathology, with particular reference to the elucidation and classification of the various forms of inflammation. The substance of these lectures will form the basis of the subsequent instruction in this subject in all departments, and thus insure uniformity in the teaching and understanding of the causes of disease. These lectures are supplemented by autopsies before small sections to demonstrate gross lesions. Several weeks are given to practical instruction in normal physical signs as applied to the chest. Having obtained some knowledge of pathology the student by means of recitations is made familiar with the principles of surgery, medicine and obstetrics.

Students who have completed elsewhere courses in physiological chemistry or pharmacology equivalent to those of the second

year, may by passing examinations at the beginning of the term be excused from further attendance upon them.

Students thus excused from part of the second-year work and those who have been allowed electives in their first year may take one or more of the following elective courses during their second year — namely: 1. Bacteriology in its practical relation to disease. 2. Materia medica recitations of the third year. 3. Manikin course in obstetrics. 4. Obstetrical clinic. The two latter elective courses are in preparation for the required work in practical obstetrics, which usually taken in the third, can thus be taken during the second summer if desired.

In the third year medicine, surgery, materia medica, therapeutics and obstetrics are studied systematically from text-books and practically at the bedside, in the dispensary and in general clinics. Enough didactic lectures are given by the Professors of Medicine and Surgery at the beginning of the session to explain general principles in symptomatology and diagnosis. Throughout the year the class must attend in small sections one or more daily recitations from standard text-books upon subjects previously assigned and learned. Pathology is studied in greater detail than previously, both in the laboratory and the dead house, and as far as possible morbid processes are demonstrated in advance of the study of the disease in the text-book or its clinical presentation.

In conjunction with the bedside teaching instruction is given in all of the modern laboratory aids in diagnosis classified under the term of clinical pathology.

Groups of ten or twelve students are taught by individual experience the methods of examining patients for the detection of abnormal physical signs, and at the close of the session all students are expected to be familiar with the recognition and treatment of the common diseases and be conversant with the fundamental subjects of a medical education. The specialties taken up in this year are neurology, pediatrics, toxicology, genito-urinary diseases and gynæcology. They are taught by clinical lectures as part of the general subjects of the practice of medicine, surgery and obstetrics.

To meet the requirements of hospital and other boards of examination, such as those of the civil service or the army and navy, students who wish to compete in these examinations may elect in their third and fourth years to have all their recitation exercises with special instructors appointed by the faculty. A separate fee is required for this service.

The fourth year is devoted chiefly to the study of diagnosis and treatment of disease at the bedside, in the dispensary and in clinics. The extent of this may be inferred from the present arrangement of the schedule, which contemplates about fifty hours of hospital-ward work in medicine and nearly the same number in surgery for every student. There are as few lectures as are consistent with the proper exposition of the chief problems confronting the profession, and these are delivered at the outset of the term in order that the student may become familiar as soon as possible with the facts which are to be taught practically. For example, to the professor of medicine twelve didactic lectures are assigned. This proportion has to be exceeded somewhat in therapeutics, obstetrics and the specialties, but many of these lectures are illustrated by the presentation of typical cases and are really clinics. The clinical instruction in surgery is supplemented by an operative course in which the student performs upon the cadaver all the common operations. Particular attention is also given to the methods of making medical and surgical diagnosis, and in this connection constant use is made of the bacteriological and chemical laboratories where the student examines specimens taken at the bedside during one exercise, and reports the results to the class at the next.

Hygiene and its application in the province of the physician and public health officer is taught by lectures supplemented by demonstrations of the plans and methods of the city health board.

The major part of the theoretical instruction, as in the previous years, is given by recitations in which the subjects of medicine (including neurology), surgery (including orthopædic surgery and genito-urinary diseases), therapeutics, obstetrics and gynæcology,

are concluded, and pathology, anatomy, chemistry, and physiology and materia medica are reviewed.

The instruction in the specialties, which is made the distinguishing feature of this final year, is begun with a few clinical lectures and is continued by a course in the examination and treatment of dispensary patients by each student. Every one receives from fourteen to twenty-one hours of this training (the number varies somewhat with the subject), and should become reasonably proficient in the use of instruments, the ability to make diagnoses and give relief. There is no attempt made to produce experts, but each one before graduation must know enough about the specialized branches of medicine to be competent general practitioners. The lectures upon the physiology of the organs of special sense delivered in the fall to the second-year class, must also be attended by the seniors. These lectures serve as an introductory review of facts necessary for a proper knowledge of the specialties and obviate unnecessary repetitions by the different professors.

Every student must personally attend a definite number of cases of labor, and for this purpose the maternity service connected with the college offers excellent opportunities. The faculty earnestly recommend that this work be accomplished in the summer preferably of the third year; by the proper choice of electives it is possible in the second summer, but this is not as desirable or profitable. If taken during the regular winter session much loss in other work would result. Those who for any proper reason cannot take this course as advised in the summer might, however, succeed in obtaining the necessary cases during the winter by selecting odd hours when not engaged in section work, and by arrangement with the office to receive telephone calls.

As in the previous year there are the same electives in recitations for those who wish particularly to fit themselves for hospital and other competitive examinations. There is also offered an advanced course in neurology in a hospital devoted largely to the care of this class of patients. There will in addition be elective practical courses in the dispensary, but until sufficient material becomes available these cannot be definitely announced.

DETAILS OF THE PLAN OF INSTRUCTION.

ANATOMY.

GEORGE WOOLSEY, M.D., *Professor of Anatomy.*
IRVING S. HAYNES, M.D., *Professor of Practical Anatomy.*
DR. WILLIAM F. STONE, *Instructor.*

Assistant Demonstrators of Anatomy.

DR. WM. F. STONE, DR. JOHN A. HARTWELL,
DR. JOHN ROGERS, JR., DR. FRANK S. FIELDER.

Anatomy is taught in the first and second years by lectures, recitations, section demonstrations and dissection. A review quiz to prepare for State and hospital examinations is held during the fourth year. The course in anatomy is arranged to correspond as far as possible with the courses in physiology and histology.

Lectures are confined to practical applied anatomy of the bones and joints, and follow the recitations on these subjects. In the second year the lectures are devoted to regional, applied and surgical anatomy, the students being already well grounded in descriptive anatomy. The order of subjects is head and neck; thoracic, abdominal and pelvic cavities and viscera and perineum.

One lecture a week is given during the second year by the Professor of Practical Anatomy on the development and gross anatomy of the nervous system, the gross anatomy and relations of the extremities and the viscera.

Professor Gage will give six lectures on embryology during the month of March to first-year students.

Descriptive Anatomy is taught by recitations, section demonstrations and dissection.

Recitations, from standard text-books, are held by the Instructor in Anatomy twice a week for each section of the first-year class and once a week for each section of the second-year class. During the first year bones, joints, muscles, arteries and veins are recited upon; during the second year the nervous system and the viscera. Written reviews are held at intervals under the direction of the Professor of Anatomy, the last of which is a general review or examination of the year's work. In the first year the students of each section begin to recite upon the bones of that part which they are to dissect at the end of the first month, and so on through the second and third months.

PRACTICAL ANATOMY.

Section Demonstrations are conducted by the Professor and Assistant Demonstrators of Practical Anatomy once a week for each section during the first and second years. During the first three months of the first year the students are prepared for their dissection by recitations in the class-room, upon the bones of the part they are to dissect in the following month, and by section demonstrations on the cadaver, by means of which they are taught how to dissect, what to find, and where to find it. In addition, one preliminary demonstration is given weekly from October to January on the thoracic, abdominal and pelvic viscera to prepare students for the course in physiology and histology by demonstrating the organs whose function and structure they are to study. After this the joints are demonstrated and the nervous system is begun. In the second year the brain and nervous system, organs of sense, viscera, and perineum are demonstrated.

Dissection.—The dissection of six parts (two courses) is required, and more may be done at the option of the student. Three to six parts may be dissected in the first year, which is especially arranged to provide ample time for dissection. Students are advised to dissect in the second year also, even if the required six parts have been completed. In the first year,

dissection is commenced after the recitations and section demonstrations of the first month have prepared each student of the part assigned, and so on for the first three parts.

In the dissection of the second three parts the work of the first course, including the joints, is reviewed and, in addition, the dissection of the viscera and minuter parts is required. Students are examined and marked on the dissection of each part required. Prepared bones are loaned to students during the session from a large collection kept for this purpose.

Preliminary training in comparative anatomy is very desirable. A practical in addition to a written examination is held by the Professor of Anatomy at the end of the second year. At the end of the first year there is a written review or examination on the work of the year.

Advanced, Special and Post-Graduate Courses.—Facilities are offered to students and the medical profession for pursuing advanced, special and post-graduate courses in practical anatomy.

Furthermore, during the months of May and June a course in applied anatomy will be inaugurated consisting of practical work with demonstrations on the cadaver.

PHYSIOLOGY.

AUSTIN FLINT, M.D., LL.D., *Professor of Physiology.*

Instructor,
DR. JOHN A. HARTWELL,

Assistant,
DR. LOUIS NEUMANN.

Instruction in this branch is given by lectures and recitations, during the entire session, to first-year and second-year students.

Lectures.—The lectures by the professor cover the field of medical physiology within the first two years. The first ten lectures of the second-year course, devoted to the special senses, are given to the second-year class and the fourth-year class together. Fourth-year students are thus enabled to review the special senses as an introduction to the study of ophthalmology

and otology. Throughout the entire course on physiology, special attention is paid to its applications to practical medicine and surgery, much time being devoted to what may be called applied physiology. Physiological chemistry, anatomy and histology are taught only to the extent essential to a comprehension of the physiology of the systems and organs of the body. These subjects are completed by practical laboratory work.

Recitations. — First-year students recite twice a week, completing the subject of human physiology, as taught by the professor, except the nervous system and the special senses. Second-year students recite twice a week up to Dec. 25, and once a week after Jan. 1, on the special senses and the nervous system. They also briefly review the work of the first year. Review recitations for State Board examinations are held for fourth-year students.

CHEMISTRY, PHYSICS AND TOXICOLOGY.

RUDOLPH A. WITTHAUS, M.D., *Professor of Chemistry.*

Assistant Professor,
DR. IVIN SICKELS.

Instructors,
DR. LOUIS W. RIGGS, DR. CHARLES G. L. WOLF.

Assistant,
CARROLL D. PARTRIDGE.

Lectures.—Students of the first year will receive two lectures each week on physics, the divisions of the subject being considered in the following order: General properties of matter and force, mechanics, hydrostatics, pneumatics, optics, electricity, heat and acoustics. The lectures will be abundantly illustrated, and the relations of physics to surgery and medicine will be particularly considered.

During the second year students will attend two lectures weekly. Organic chemistry will be considered in the earlier part of the term to an extent sufficient to impart a knowledge of the principles of combination of the carbon compounds and the

properties and relationships of those which are of physiological, toxicological or therapeutical interest. The lectures during the latter part of the second year will be upon physiological chemistry.

During the third year one lecture will be given weekly on toxicology for twenty weeks. In these lectures the medical and medico-legal bearings of the subjects will be chiefly considered.

Recitations.—Students of the first year will recite twice each week on physics and the principles of chemistry and mineral chemistry. Those of the second year will recite once weekly on organic and physiological chemistry.

Laboratory Work.—Laboratory instruction will be given students of the first year four hours weekly during the entire session. This course will consist of an experimental study of the commoner elements and compounds in illustration of the recitation course, and of training in the processes of qualitative analysis of inorganic substances, and poison, mineral and organic.

Students of the second year will receive laboratory instruction two hours weekly during the term in physiological and clinical chemistry.

Each student is fully supplied with all apparatus and chemicals required, except urinometers, which are carefully corrected for the student that they may serve for future use.

These courses are personally conducted by the Professor of Chemistry and Physics and Assistant Professor, assisted by the instructors.

First-year students presenting satisfactory evidence of having performed equivalent work in chemistry and physics will be excused from first-year work in this department, and be given advanced laboratory work equivalent in hours to that omitted.

MATERIA MEDICA AND THERAPEUTICS.

HENRY P. LOOMIS, M.D.,
Professor of Materia Medica and Therapeutics.

Instructors,
DR. WARREN COLEMAN. DR. EDMUND P. SHELBY.

Clinical Assistant,
DR. RUSSELL BELLAMY.

Instruction is given in this department by means of lectures, clinical instruction, recitations and practical laboratory work.

Lectures.—These are given by the professor twice a week to the third-year students and once a week after Dec. 1st, to the fourth-year students. They are confined almost exclusively to therapeutics, as it is believed that materia medica can best be taught by recitations and by laboratory work.

The lectures to the third-year students will consider the therapeutic uses of the most important drugs from the standpoint of the drug itself, such as the methods of prescribing the drug and the conditions for which it is given; only so much of the physiological action of the drug will receive attention as will explain its therapeutic value.

The lectures to the fourth-year students will be confined almost exclusively to a consideration of the systematic treatment of the different diseases. The plan of treatment will be given in detail, with definite instruction as to the drugs to be used and the preparations which are most reliable.

Lectures will be given on remedial agents other than drugs, such as massage, dietetics, climatology, mineral waters and hydrotherapy.

Clinical Instruction.—A new departure in the teaching of therapeutics will be made by affording the students of the third and fourth years opportunity to observe the effects of the different remedies on the natural course of disease. To accomplish this the classes will be divided into small sections and taken by the professor into the wards of Bellevue Hospital. Actual practice

is given in the employment and application of the various therapeutic agents used in medicine, such as the hypodermic syringe, aspirators, leeches, cups, cauteries, stomach-tube and stupes. The hydropathic establishment connected with this hospital is one of the most complete in the country. Here to small sections will be demonstrated the various applications of water to the treatment of disease — such as baths, packs, douches etc. A professional masseur will show the technique of massage and the Swedish movements. The treatment of the different diseased conditions observed will be systematically studied, and opportunities will be given to the members of the class to make personal examination of the patients and to watch the modification of disease produced by the remedies prescribed. The clinical work of the third and fourth years affords abundant opportunities for further training in practical therapeutics. A general medical clinic will be held by the professor once a week in the amphitheatre of Bellevue Hospital, at which special attention will be given to the treatment of the diseases under consideration.

Recitations.—Students of the third year will recite to the instructor twice a week from a standard text-book. During the fourth year a recitation will be held once a week on therapeutics.

The recitations will embrace a study of the action of all the more valuable remedial agents in connection with the description of the drugs themselves.

Each student will be thoroughly drilled in prescription-writing and in the doses of the more important drugs.

Examinations will be held at stated times during the session by the professor to enable him to judge of each student's progress.

Laboratory Work.—The course of laboratory instruction is taken during the second year, and consists of six hours each week for half the year. The class is divided into small sections, and is under the personal supervision of the instructor. The method of teaching is distinctly practical. The student is made familiar by the laboratory work with the physical and chemical properties of drugs. This course includes such subjects as the forms of drugs, their weight and bulk, the measurement of solid and fluid

drugs, methods of administering medicines, particularly with reference to appropriate combinations, and the study of solubilities. The subject of incompatibilities is clearly demonstrated.

Prescription-writing is taught throughout the course, and each prescription written is compounded by some member of the section.

The materia medica laboratory is equipped for pharmaceutical instruction, and students are taught by practical exercises in the preparation and compounding of drugs.

The laboratory is provided with a full assortment of crude drugs and the various preparations of the materia medica, also with complete appliances for instruction in the remedial agents which are not medicines. Advanced students will be given opportunity to study experimentally the physiological action of drugs.

MEDICINE.

W. GILMAN THOMPSON, M.D., *Professor of Medicine.*

Professors of Clinical Medicine,

ALEXANDER LAMBERT, M.D., CHARLES E. NAMMACK, M.D.,
WARREN COLEMAN, M.D., LEWIS A. CONNER, M.D.

Instructors,

DR. DEVER S. BYARD, DR. C. N. BANCKER CAMAC,
DR. SHERWOOD B. IVES.

Assistant,

DR. RUSSELL BELLAMY.

The Course of Medicine, extending over three years, is so graded that the student pursues a logical sequence of work throughout. No didactic lectures upon Practice of Medicine are delivered, their place being wholly taken by bedside instruction and recitations. The complete course comprises the following subdivisions (the Roman numerals indicate the years of the course in medicine, not those of the curriculum):

I. Recitations from an elementary text-book.
   Normal Physical Signs of the Chest.
II. Recitations from an advanced text-book, including written reviews.
   Abnormal Physical Signs of the Heart and Lungs.
   Bedside History-taking.
   Bedside course in Symptomatology.
   Clinical Pathology.
   Bedside course in General Medical Diagnosis.
   Eighteen lectures on General Symptomatology.
   General Hospital Medical Clinics.
III. Advanced bedside course in Symptomatology and Diagnosis.
   Demonstrations of patients by the student before the class.
   Courses in the Out-Patient Clinic in the Heart and Lungs and General Medicine Classes.
   General Hospital Medical Clinics.
   Medical Conferences.
   Twelve lectures upon Diatheses, Toxæmias etc.
   Elective advanced work in Clinical Diagnosis (Clinical Microscopy, History-recording etc.).
   Review quizzes for State Board examinations.

The details of the methods of instruction in medicine for each year of the curriculum are as follows:

I. SECOND YEAR STUDENTS.

Recitations.—Second-year students begin the study of medicine with systematic recitations from an elementary text-book, in which the subjects of nomenclature, etiology, morbid anatomy and typical symptoms only are dwelt upon.

Physical Diagnosis.—Normal physical diagnosis of the chest is taught to sections of ten students each in classes from the Dispensary under Dr. Byard. Each student is required to map out upon the patient the normal positions and sounds of the thoracic viscera, and toward the end of each course of twelve lessons a few abnormal cases are introduced for comparison.

II. THIRD-YEAR STUDENTS.

Recitations.—Third-year students recite twice a week from an advanced text-book on practice, special emphasis being given to symptomatology, complications, diagnosis and treatment.

Written reviews are held at intervals to familiarize the student with examinations. All recitations are obligatory and the recitation marks received form an important component of the final examination marks of the year.

Ward Work.—Systematic and obligatory ward work is begun in classes not exceeding fifteen students each, who accompany the Professor of Medicine on routine rounds through the hospital wards. Professor Thompson instructs at the Presbyterian Hospital until January, and at Bellevue until the close of the session. Repeated illustrations of all the common diseases are studied, and the advantage to the student of personally examining many cases of such diseases as typhoid fever, pneumonia, nephritis, cardiac ailments, etc., in different stages of development, and of following their daily progress, far outweighs the obsolete system of attendance upon didactic lectures. The student is first taught to observe and describe symptoms and investigate etiology, and as he attains proficiency is required to make diagnoses, offer prognoses and suggest treatment.

General Diagnosis.—Dr. Coleman gives a special course in general medical diagnosis, in which at one lesson the student is required to examine, compare and report upon each variety of pulse found in the ward; at another upon each variety of cachexia, anæmia or œdema; at another, upon each variety of abnormal liver or spleen; and so on, comprising all the important physical examinations.

Clinical Laboratory Courses are conducted under Dr. Camac's supervision in immediate connection with the study of hospital and dispensary cases. In this laboratory the student acquires methods and technique which he is required to put in practice with patients. The laboratory is also used extensively by the visiting staffs of the Hospital and Out-Patient clinic for completing the data of their cases.

The class is divided into small sections, so that each member receives the personal assistance of the demonstrator. At the conclusion of the course a written examination is held, upon the result of which, as well as upon the character of the work done, each successful student is given a certificate to the effect that he has completed the course. Upon the presentation of this certificate to the demonstrator in charge, the student is allowed the use of the laboratory and its apparatus for the study of cases in the wards. When assigned to cases at the general medical clinic the student is required to report the result of his examination of the sputum, blood, urine etc. Students of the fourth year, reporting at the medical conferences, for which longer time is allowed for preparation, make more extended research in the laboratory. Students are also, from time to time throughout the year, assigned to study cases in the Hospital and Dispensary; records are kept of these cases from which valuable clinical deductions may be made.

The apparatus employed is of such simple nature that it can readily be transported to the bedside, the work being thus essentially practical and such as is a direct guide to diagnosis. The student *himself* uses the apparatus so that he may become familiar with its care and application.

Following is a brief outline of the course:

Blood.—Technique of obtaining blood specimens; normal constituents of blood; blood formation in bone marrow; corpuscle counting and hæmoglobin estimation; technique of fixing and staining specimens; diseased conditions determined by differential counting; study of blood-serum diagnosis; leucocytosis; malarial and other blood parasites; medico-legal value of blood stains.

Sputum.— Collection and examination of the gross specimen; disinfection of sputum cups, etc.; specimens of sputum in asthma, pneumonoconiosis, tuberculosis, gangrene and hemorrhage from the lungs, pneumonia etc.; diphtheria and other bacilli.

Gastric Contents.—Examination of vomitus; administration

of test meals; method of obtaining and examining gastric contents; lavage.

Fæces.—Method of obtaining and examining; intestinal parasites and ova.

Urine.—Microscopic examination with reference to diagnosis; gonococci, tubercle bacilli, etc., seminal fluid in its medico-legal aspect, crystalline deposits.

Exudations and Transudations.—Ascitic and pleuritic effusions, cystic contents, vaginal discharges.

Each student is furnished typical specimens which he stains and studies at the demonstrations and preserves for future reference and comparison.

Physical Diagnosis.—Physical diagnosis of abnormal conditions within the chest is taught by Professor Lambert to classes not exceeding a dozen students each. This course of twelve lessons for each class is very comprehensive, owing to the large attendance at the class of heart and lung diseases of the Bellevue Out-Patient Department, from which the patients are derived.

General Medical Clinics.—General medical clinics are held weekly in the amphitheatre of Bellevue Hospital by the Professor of Medicine. At these clinics students read written histories of cases which they have studied on the previous day. They are required to demonstrate their findings upon the patient and are questioned before the entire class in regard to diagnosis, etc. These clinics are also utilized by the Professor of Medicine to exhibit cases of exceptional rarity or difficult diagnosis. A second general medical clinic is held weekly in the Bellevue amphitheatre by the Professor of Therapeutics, at which the effects of treatment are made the prominent feature.

Lectures.— A course of eighteen lectures upon general symptomatology is given by the Professor of Medicine, which is designed as introductory to the systematic bedside teaching which he conducts upon hospital rounds.

III. FOURTH-YEAR STUDENTS.

Fourth-year students attend the general ward classes and amphitheatre clinics with the Professor of Medicine as described

for the third year, and also make systematic rounds through the wards with Professors Lambert and Nammack when on duty in Bellevue Hospital, and with Dr. Conner at the Hudson Street Hospital.

Lectures.—A course of twelve lectures is given by the Professor of Medicine upon such general topics as the diatheses, toxæmias, etc.

Medical Conferences.—Under Dr. Coleman's direction, students are assigned to special cases which they study in detail for several weeks, reviewing the literature of the subject, and which they then report in writing at a medical conference, at which their fellow-students are called upon to offer criticisms and general discussion.

Students also attend special classes in the Dispensary and during the latter part of the year recite in a review quiz in preparation for hospital and State Board examinations. An elective course in advanced clinical pathology and diagnosis is offered in the fourth year.

SURGERY.

LEWIS A. STIMSON, M.D., *Professor of Surgery.*

Professors of Clinical Surgery.

FREDERIC S. DENNIS, M.D., FREDERICK W. GWYER, M.D.,
GEORGE WOOLSEY, M.D., FRANCIS W. MURRAY, M.D.,
FREDERICK KAMMERER, M.D., PERCIVAL R. BOLTON, M.D.,
ALEXANDER B. JOHNSON, M.D.

Instructors,

DR. JOHN ROGERS, JR., DR. BENJAMIN T. TILTON,
DR. ARCHIBALD E. ISAACS.

Assistants,

DR. WILLIAM F. STONE, DR. H. M. ARCHER.

Surgery will be taught in the recitation room, at the bedside, at hospital clinics, and by lectures.

In the second year the students are required to attend

recitations on the principles of surgery two hours a week throughout the term. For this purpose the class is divided into small sections to insure thorough work; so far as time permits instruction will be given at the bedside.

In the third year recitations are continued upon regional surgery; the class is instructed in sections in Bellevue Hospital in history-taking and methods of surgical examination and diagnosis, two or three hours a week for part of the term; bedside instruction is given daily in several hospitals to small groups, and formal clinics are held in Bellevue, New York, and other hospitals; about thirty lectures will be given by the Professor of Surgery, and a clinic for diagnoses is held once a week at which the students are required personally to examine and report upon the cases.

In the fourth year the students will receive clinical instruction in small groups in several hospitals and dispensaries upon general surgery and the special branches,—eye, ear, nose and throat, genito-urinary diseases, dermatology and orthopædics; will attend the clinics and will have a review quiz in preparation for examination.

The members of the sections are trained in the examination of patients, the dressing of wounds and fractures and the administration of ether.

The opportunities for instruction in the special branches are exceptionally ample. There will be several clinical teachers in each subject, each with hospital and dispensary services. The student will be enabled directly to examine and study cases, and will have a certain choice as to the time given to each branch.

Operative surgery will be taught in the fourth year in sections. The course consists of recitations, work upon the cadaver and bandaging. As the material is abundant each member of the class will perform all the principal surgical operations.

OBSTETRICS.

J. Clifton Edgar, M.D., *Professor of Obstetrics and Clinical Midwifery.*

Instructors,

Dr. George D. Hamlen, Dr. George G. Ward,
Dr. George P. Shears,
Dr. Gustave Seeligmann.

Instruction in obstetrics will be given during the second, third and fourth years by

1. Recitations.
2. Illustrative Lectures.
3. Obstetric Clinics and Conferences.
4. Attendance upon Cases of Confinement.
5. Manikin Practice and Section Work.
6. Obstetric Histology, Pathology and Bacteriology.

1. Recitations from a standard text-book will be held by the instructor in obstetrics during the second year upon the physiology, and during the third upon the pathology of obstetrics, the latter including obstetric surgery.

These recitations are so scheduled as to cover the entire field of the subject laid out for the college year, are supplementary to the work of the Professor of Obstetrics during each of these two years and prepare the student for an intelligent appreciation of his subsequent illustrative lectures, obstetric conferences, attendance upon cases of confinement, clinics and manikin practice.

2. The Illustrative Lectures comprise a systematic course, running through the third year, upon the physiology and pathology of obstetrics.

These lectures are theoretical to a limited extent only, being mainly demonstrative and illustrative in character. To this end ample blackboard space is used, as well as an abundant collection of pelves, entire, normal and deformed, mesial sections of the

same and in addition a supply of diagrams, charts, carefully selected plaster composition and metal models, wet and dry preparations and instruments.

In conjunction with these lectures additional recitations are held by the Professor of Obstetrics upon the subject-matter of the college year and for final review.

3. Obstetric Clinics and Conferences.—A weekly obstetric clinic, throughout the year, for both the third- and fourth-year classes is held at the Mothers' and Babies' Hospital. At this clinic abnormal cases of pregnancy, labor, and the puerperium are demonstrated, and the major and minor obstetric operations performed.

In addition, infant feeding and the care of mother and child during the lying-in period and early infancy are taught. During both the third and fourth year members of the class will be called upon in rotation to examine patients and discuss etiology, diagnosis, prognosis and treatment. These "obstetric conferences" will review the illustrative lectures, manikin work, and the student's work in his attendance upon confinement cases. By this means each individual student's standing in the department of obstetrics is ascertained. During the latter half of the second year six obstetric clinics are given at the same hospital. Attendance upon these clinics is optional.

4. Attendance upon Cases of Confinement.—Each candidate for the degree of M.D. is required to present satisfactory evidence to the effect that he has attended a definite number of cases of confinement.

An opportunity to fulfil this requirement is given at the Mothers' and Babies' Hospital, Lexington Avenue and 52d Street, where students receive this practical instruction from the Professor of Obstetrics and his assistants. Students are lodged and boarded in the above hospital for periods of two weeks or more and attend confinement cases both in the hospital building and in the tenement-house districts.

During the student's attendance upon his practical maternity course he may be excused from the exercises of the College

during the fourth college year, otherwise he shall take his practical obstetric course during vacation time.

5. Manikin Practice and Section Work.—Manikin practice is given to sections of the class during the fourth or senior year, and consists of work by individual students upon the manikins, under the supervision and criticism of an instructor.

The mechanical phenomena of labor; modes of delivery; abnormal presentations and positions with methods of delivery of each; version; application of the forceps; and other manipulations will be demonstrated by the instructor and performed by the student.

Diagrams, models, casts, wet and dried specimens, will be used in the demonstrations.

The sections will also be instructed at the bedside in the management of pregnant and parturient women, the care of the new-born child, abdominal palpation, and pelvic mensuration.

6. Obstetric Histology, Pathology and Bacteriology.—Laboratory instruction is given during the third year by the Professor of Pathology upon the histology of the vulva, vagina, uterus, ligaments, Fallopian tubes and ovaries in the pregnant and non-pregnant conditions, and upon the histology and pathology of the decidua, chorion, placenta, and umbilical cord.

GYNÆCOLOGY.

WILLIAM M. POLK, M.D., *Professor of Gynæcology and Obstetrics.*

Instructors,

DR. CHARLES C. BARROWS, DR. WILLIAM TRAVIS GIBB,
DR. GEORGE D. HAMLEN, DR. JOHN ASPELL.

Instruction in gynæcology is given by recitations, lectures, ward and class-room demonstrations, clinics, and laboratory demonstrations.

Six Lectures, upon topics selected for their special interest and importance to the subject as a whole will be given at the beginning of the third year.

Recitations are planned to cover the entire subject and are held one hour a week during the third year of the course. In order that the instruction throughout the department may be as nearly in unison as possible, a synopsis of the subject-matter of each lesson is prepared by the instructor and amended and revised by the head of the department. This is presented to the student for comparison with his text-book, to which it is an addendum. This method insures the co-operation of the head of the department in the groundwork of his subject and enables him to keep in touch with each student until his graduation.

Class-Room and Ward Demonstrations are given to sections of the fourth-year class twice a week throughout the year. This instruction includes the examination of patients by the students, who are thereby drilled in the methods of physical diagnosis as applied to the pelvis. When necessary the patients are anæsthetized.

The routine of treatment appropriate to the various conditions found is demonstrated, the students assisting when possible. In this way, not only is familiarity acquired with normal conditions within the pelvis and the various departures from this state induced by disease, but opportunity is afforded to see and put in practice actual measures of relief and to watch the subsequent course and treatment of these cases.

Operations are performed three days every week at which the several sections are enabled to study the detail of every operation peculiar to this department.

A General Clinic is held once a week at which students selected in rotation are required to examine the patient, make a diagnosis and suggest treatment. They are questioned before the class upon all these topics, as they relate to the case in hand, so as to determine the correctness of their conclusions. Should operation be called for, it is then performed.

Laboratory Demonstrations of secretions, discharges and specimens obtained from patients who come under observation during this course are made to sections of the third-year class as a part of the course in clinical pathology.

PATHOLOGY.

INCLUDING HISTOLOGY, GROSS AND MICROSCOPICAL PATHOLOGY AND BACTERIOLOGY.

James Ewing, M.D., *Professor of Pathology.*
Dr. Bertram H. Buxton, *Instructor in Bacteriology.*
Dr. Otto H. Shultze, *Instructor in Gross Pathology.*
Dr. Jeremiah S. Ferguson, *Instructor in Histology.*
Dr. Max G. Schlapp, *Instructor in the Histology and Pathology of the Nervous System.*
Dr. James C. Johnston, *Assistant Instructor in Pathology.*
Dr. Guy D. Lombard, *Assistant Instructor in Histology.*
Dr. Henry S. Pascal, *Assistant Instructor in Histology.*
Dr. H. T. Lee, *Assistant Instructor in Pathology.*
Dr. Herbert S. Carter, *Assistant Instructor in Gross Pathology.*

HISTOLOGY.

The work in this subject is conducted throughout the first and during a portion of the second years by laboratory exercises and by recitations. Laboratory exercises in two two-hour sessions weekly throughout the first year, and one two-hour session weekly during half of the second year, occupy in all about 150 hours for each student. The work covers the construction and use of the microscope, the methods of preparing microscopical sections of tissues, and the normal histology of the various tissues and organs of the human body. Attention is constantly directed to the application of the knowledge to physiological phenomena, and to further this end the courses in physiology and histology proceed as far as possible in unison. When desirable the structure of human tissues and organs is illustrated by sections of embryonal and lower-vertebrate tissues.

In the first year the blood and simple tissues, the gastro-intestinal tract and adnexa, and the respiratory, circulatory and genito-urinary organs are studied. In the second year the organs of the special senses and the nervous system are considered.

Recitations.—One recitation weekly for each student is held during the first year, and the first half of the second year, on subjects assigned from the text-book on histology. These recitations are designed to completely familiarize the student with the structure of the tissues considered during the previous week in the laboratory exercises.

An examination is held at the end of each year. The standing of the student in this, as in other subjects, is determined equally from the work in the laboratory exercises and in the recitations.

PATHOLOGY.

The course of instruction in pathology gives in the second year a preliminary course of lectures on the theory and classification of inflammations, which is designed to acquaint the student with the main facts in this field, to prepare him for preliminary studies in medicine and surgery and to establish a uniform system of nomenclature to be used in this and other departments. During one half the second year, also, attendance is required at one weekly demonstration—two hours' duration—in gross pathology, at which the more common visceral lesions are exhibited. This course is designed to accompany the preliminary recitation in medicine and surgery of the second year.

The main branches of the subject are grouped in the third year in order to secure the simultaneous study of the gross and microscopical changes in diseased tissues. In the fourth year the students perform autopsies, and attend one recitation weekly in review of the entire subject.

Microscopical Demonstrations in Pathology.—The microscopical demonstrations occupy three two-hour sessions weekly throughout the year, in all about 175 hours, and they constitute the main features of the instruction in this department. The specimens studied illustrate the topics of inflammation, tumors, auto-intoxications, infectious diseases and diseases of the nervous system, and are supplemented by lectures and special demonstrations by means of sections, charts, lantern slides and micro-photographs.

Demonstrations in Gross Pathology.—On the days alternating with the microscopical studies demonstrations of gross pathological specimens are given to the students of the third year, with the material collected from autopsies. With the viscera of each case is presented an epitome of the clinical history, and, when necessary, frozen sections of the organs, and the clinical symptoms are explained from the gross and microscopical changes in the altered tissues. The student here sees the viscera of many of the fatal cases which he has studied in the wards of the hospital.

Gross pathological diagnosis is taught as a separate branch of this subject, not bearing directly on the clinical aspect of the case.

These demonstrations occupy three two-hour sessions weekly, each section of the class attending one exercise weekly throughout the year.

Post-Mortem Examinations. — Students of the fourth year are required to perform autopsies under the direction of the instructor in gross pathology, when they are made familiar with the technical procedures required in ordinary and in medico-legal cases.

Recitations.—One recitation weekly is required of each student throughout the third and fourth years. In the third year they cover the work of each preceding week. In the fourth year they are held by the Professor of Pathology and cover the entire work of the department.

BACTERIOLOGY.

The laboratory course in bacteriology occupies three two-hour sessions each week for one third of the second year, in all sixty hours for each student. The student is first made familiar with the methods of disinfection, and is required to prepare the ordinary culture media. The work then proceeds to the methods of staining and examining bacteria : their artificial cultivation and the study of biological characters; the methods employed in the separation of species; the general relation of pathogenic bacteria to disease; and concludes with the biological analysis of air,

water, soil and milk. Cultures are made from the viscera of cases of the various infectious diseases, and the student is required to cultivate and identify the important pathogenic microorganisms. The work is supplemented when necessary by the use of pure cultures, by the exhibition of anærobic cultures, and to a limited extent by inoculations in animals.

An Advanced Course in bacteriology is offered to those students who have been able in the first year to attend the course required in the second year.

This course includes the cultivation of other pathogenic microorganisms, the separation of species, and the bacteriological examination of viscera secured at autopsies.

Advanced Courses and Original Research.—The abundant facilities of the Loomis Laboratory on the fourth floor of the new building can be offered to properly qualified students and practioners of medicine who wish to pursue advanced courses of study on lines of original research, under the direction of special instructors.

SPECIAL DEPARTMENTS OF MEDICINE AND SURGERY.

DISEASES OF CHILDREN.

JOSEPH E. WINTERS, M.D., *Professor of Diseases of Children.*

Instructor,
DR. WILLIAM SHANNON.

Assistants,
DR. ROBERT S. ADAMS, DR. WILLIS S. COOKE,
DR. WALTER A. DUNCKEL.

This depamtrent will embrace clinical instruction and section teaching in all the important diseases of infancy and childhood.

There will be one clinical lecture each week in the College building, and clinical lectures in the Willard-Parker Hospital on scarlet fever and diphtheria.

In connection with the Dispensary of the Children's Department in the new College building there will be an amphitheatre

for section teaching and isolation rooms for contagious diseases, so that students will have ample opportunity for the personal study of disease.

Three hours each week will be devoted to section teaching in the Dispensary to the students of the fourth year.

Students will be required to examine sick children and discuss the diagnosis and treatment of patients assigned to them.

Special attention is given to the hygiene and feeding of infants; the digestive disorders of infants; the dietetics of childhood and the food disorders of infancy and childhood; the anatomical and physiological peculiarities of infancy and childhood; and the influence these peculiarities have on the manifestations of disease in children.

One of the distinguishing features of this department will be the instruction of each student in the art of diagnosis, by the professor in charge.

There will be practical bedside illustrations of the management, care and therapeutics of all the acute diseases of infancy and childhood.

In the clinical laboratory microscopical examinations will be made of secretions and excretions, of lesions of the mouth and throat and of sections of anatomical lesions of the important diseases of childhood.

SURGICAL DISEASES OF THE GENITO-URINARY ORGANS.

SAMUEL ALEXANDER, M.D.,
Professor of Genito-Urinary Surgery.
Instructors,
DR. MARTIN J. ECHEVERRIA, DR. GEORGE K. SWINBURNE,
DR. CHARLES L. GIBSON.
Assistant,
DR. NEWTON B. WALLER.

The course is required of students during the third and fourth years, and is designed to give instruction in diagnosis and treatment of the surgical diseases of the genital and urinary organs

and of syphilis. It consists in recitations, lectures, clinics and bedside instruction in Bellevue Hospital, and section work in the Dispensary of the College.

Lectures.—One lecture a week from the opening of the term to the first of December will be given by the professor in the lecture-room of the College. These lectures will be illustrated by lantern slides, charts, and drawings, and will be principally devoted to the principles of urinary surgery and syphilis, and are designed to serve as an introduction to the clinical courses. These lectures are required of students during the third and fourth years.

Recitations.—Recitations are given to the students of the third and fourth years from standard text-books by the instructors in the department of general surgery.

Clinic.—A clinic is held in the amphitheatre of Bellevue Hospital once a week after the first of January by Professor Alexander. At this clinic the principal operations upon the male urinary and genital organs are performed and explained, and special attention is given to the subject of diagnosis. Attendance of the clinics is required of students during the third and fourth years.

Section Teaching at the Out-Patient Clinic.—This is required of students during the third year. The class is divided into sections of small size, and the instruction is given either by the professor in charge of the department or by his chief of clinic. Special attention is given in this course to the diagnosis and treatment of the venereal diseases, and to the use of the special instruments.

Section Teaching in Bellevue Hospital.—The fourth year class is divided into sections of small sizes and instruction is given in the wards of Bellevue Hospital by Professor Alexander.

This course is devoted principally to exercises in the diagnosis of diseases of urinary organs, to instruction in the use of special instruments and apparatus, and to the post-operative treatment of cases. The courses continue throughout the entire session held twice weekly.

Special Courses to Advanced Students.—A number of special courses in this department will be opened to graduates in medicine, which will be conducted by the professor in charge, and his assistants. Information in regard to these courses may be obtained from the Secretary of the Faculty.

NERVOUS DISEASES.

CHARLES L. DANA, M.D.,
Professor of Diseases of the Nervous System.

Instructor,
DR. JOSEPH FRAENKEL.

Assistants,
DR. MAX G. SCHLAPP, DR. SAMUEL M. EVANS.

The regular schedule work consists of a preliminary series of ten lectures, given by Professor Dana, in which the general outline of the work for the year is given, with demonstrations of the general anatomy, general symptomatology and methods of examination of the nervous system. During the rest of the term clinical lectures on nervous diseases are given weekly in the amphitheatre of Bellevue Hospital. Section work is also given weekly to classes in the wards of Bellevue Hospital during the whole term.

During two months of the term special section work is given to the students in the fourth year, under the charge of the instructors and clinical assistants. In this way the student before graduation becomes practically familiar not only with the functional and chronic, but with the more acute forms of nervous diseases. The opportunities for seeing such diseases in the alcoholic pavilion, in the insane pavilion, and in the general wards of Bellevue are probably unsurpassed.

Opportunities for special study in clincial neurology are also given, to such advanced students as may select it, in the Bellevue Dispensary and in the neurological clinic connected with the College.

It is considered of supreme importance that the student of nervous diseases be thoroughly grounded in the more elementary facts of the anatomy and physiology of the nervous system. It is for this purpose in particular that certain preliminary didactic lectures with quizzes are given.

To carry out this purpose further, courses in the gross and microscopical anatomy of the nervous system are provided for special students and also courses in neuropathology, with opportunities for original investigation for those who so desire it.

MENTAL DISEASES.

ALLAN MCLANE HAMILTON, M.D., F.R.S.E.,
Professor of Mental Diseases.

Assistants,

DR. WILLIAM HIRSCH, *Instructor.*
DR. GEORGE DE FOREST SMITH.

The Professor of Mental Diseases will give a series of clinical and didactic lectures once a week for two months, illustrated by the lantern and cinematograph. Clinics will also be given at the asylum once a week during the latter part of the course.

Instruction will also be given in diagnosis, the legal commitment of the insane and the relations of insanity to medical jurisprudence.

DERMATOLOGY.

GEORGE T. ELLIOTT, M.D., *Professor of Dermatology.*

Instructors,

DR. THURSTON G. LUSK, DR. HENRY H. WHITEHOUSE.

Instruction in Dermatology will be given by the clinical professor and his assistants by means of lectures to the whole class and also by section work. No teaching will be given didactically, but the cutaneous diseases will be demonstrated on the living subject. Abundance of material for such instruction is obtainable and the student can thoroughly familiarize himself with the more common as well as with the rarer diseases of the skin by

actual personal contact and observation. Attention is particularly paid to the diagnosis and the etiology of skin diseases, but their therapeutics also receive due consideration.

LARYNGOLOGY AND RHINOLOGY.

CHARLES H. KNIGHT, M.D., *Professor of Laryngology.*

Instructor,	*Assistant*,
DR. JAMES E. NEWCOMB,	DR. H. ARROWSMITH.

Instruction in Laryngology and Rhinology is given by a clinical lecture at the College by the professor of the department. The subjects then considered are demonstrated to the fourth-year students by the assistants on Saturdays at the Demilt Dispensary and at the Manhattan Eye and Ear Hospital. The class is divided into sections, and each member is expected to examine patients and perform manipulations. The clinics are fully illustrated by plates and models, and, as far as possible, by clinical material.

OPHTHALMOLOGY.

CHARLES STEDMAN BULL, M.D., *Professor of Ophthalmology.*

Instructors,

DR. ROBERT G. REESE, DR. COLMAN W. CUTLER.

Instruction in Ophthalmology consists in lectures at the College building once a week, and in sectional teaching two hours a week at the New York Eye Infirmary. The weekly lectures at the College are mainly didactic, and consider the subjects of physiological optics, the theory of the ophthalmoscope, refraction and accommodation, the anomalies of the ocular muscles, and the deep lesions of the eye which are not susceptible of clinical demonstration. Thus the entire field of ophthalmology is covered. The sectional teaching at the Eye Infirmary is devoted partly to clinical ophthalmology and the use of the ophthalmoscope, and partly to instruction in the errors of refraction and the rudiments of the fitting of lenses.

OTOLOGY.

GORHAM BACON, M.D., *Professor of Otology.*

Instructor,

DR. FRANKLIN M. STEPHENS.

Assistants,

DR. EARLE CONNER, DR. GEORGE SLOAN DIXON.

During the first half of the third year a systematic course of weekly lectures is given. These lectures are practical in character, including a consideration of the anatomy and physiology of the ear and the various methods of examination. Patients are shown to the class in order to familiarize the students with the symptoms and character of the more important diseases.

For the fourth-year students, the class is divided into sections for clinical instruction in the Dispensary. Each student receives practical instruction from Professor Bacon and his assistants in the examination of patients, the use of the otoscope and the various methods of testing the hearing. The student is permitted to examine patients and, after a probationary period, to prescribe for them and thus gradually assume the duties of a clinical assistant. The students have also an opportunity of witnessing the more important operations in aural surgery, including intracranial complications.

ORTHOPÆDIC SURGERY.

NEWTON M. SHAFFER, M.D., *Professor of Orthopædic Surgery.*

Instructors,

DR. P. HENRY FITZHUGH, DR. JOHN MCGAW WOODBURY.

Assistant,

DR. HENRY SCOTT.

The course of study in the Orthopædic Department includes a stated clinical lecture once a week, with detailed demonstrations in sectional work twice a week during two months of the year.

During the regular clinical course especial attention is given to the early recognition of the deforming diseases of childhood, also to the symptomatology, pathology and differential diagnosis of chronic and progressive deformities, including the mechanical and operative treatment.

In detail, the course consists of practical illustrations of methods of treatment, the apparatus used being thoroughly explained both in construction and in principle, attention being called to even minute points of construction and use. The operative side is fully dwelt upon, the indications for operative interference as an adjunct to the mechanical work being demonstrated. Ample clinical material is provided, and models of conventional forms of apparatus are placed at the disposal of students.

In the section and laboratory work the student is required to assist in the management of selected cases, to familiarize himself with the various methods of treatment, to construct the simpler forms of apparatus, to secure a practical knowledge of the details of construction of the more complicated instruments and to familiarize himself with the pathological conditions existing in the deformities of childhood.

A practical departure will be inaugurated in the Department of Orthopædics by making a fully equipped workshop the laboratory of orthopædic instruction.

HYGIENE AND SANITARY SCIENCE.

A Department of Practical Hygiene and Sanitary Science has been established this year.

The Objects of this department are: First. To afford to physicians connected with local health boards or public institutions, or otherwise interested in sanitary matters, special instruction in the various branches of practical hygiene and sanitary science. Second. To provide for the undergraduate students of Cornell both systematic obligatory instruction in the principles of hygiene, and further optional courses of advanced study.

Two Courses Annually.—While the undergraduate systematic course in General Hygiene will extend through the regular winter term, the post-graduate courses will be duplicated in two sessions of six weeks each to accommodate physicians coming from a distance.

The Fall Term will begin on the first Tuesday in October and continue for six weeks.

The Spring Term will begin on the third Tuesday in May and continue for six weeks.

THE PLAN OF INSTRUCTION.

Instruction will be given under the following classification:

Lectures in such subjects (*e. g.*, Sanitary Laws, etc.) as can only be taught in this manner, or in amplification of other methods of instruction.

Experimental demonstrations of sanitary methods and appliances.

Clinical instruction upon infectious diseases.

Visits to and demonstrations of the operation of sanitary processes (disinfection plants, vaccine, and antitoxin laboratories, etc.), and visits to hospitals, schools, demonstration of factories, model tenements etc.

Laboratory instruction.

LECTURES AND DEMONSTRATIONS.

Water Supply.—Characters of pure and impure water; sources and kinds of contamination; purification of water.

Air Supply.—Composition of air; sources and nature of contamination of air; simple tests for purity; respiration; consequences of overcrowding.

Food and Beverages.—The composition, adulterations, standards of purity and nutritive value of milk, milk products, cereal foods etc., and of beer, wine and spirits — Putrid poisons and food poisonings.

Disposal of the Dead.—The sanitary and medico-legal considerations of putrefaction, burial, cremation, embalming.

Infectious Diseases.—The nature and history of infection and theories of immunity.

Methods of Disinfection, etc. — Disinfectants, antiseptics and deodorants—Methods of disinfection of rooms, dejecta, clothing, bedding, carpets etc.—Isolation; quarantine ; vaccination; preventive innoculation — Routine work of sanitary officials with reference to infectious diseases.

General Hygiene.—A general consideration of its scope and practical application—Hygiene of schools, with special reference to the eyes and curvature of the spine—General and specific causation of Epidemics, modes of transmission and prophylaxis of the various diseases — Effects of climate on health — Occupation, diseases—Vital statistics.

Sanitary Engineering. — *Buildings :* Selection of sites; character of soil; exposure; surface and underground drainage; preparation of site; excavations; foundations; waterproofing; building materials; heating; lighting; ventilation; plumbing and drainage; sewage disposal in the country; sewage filtration; cesspools, etc. *Water Supply :* Protection against contamination; storage; protection against fire; distribution for fire service. *Factory Waste and Nuisance.*

Municipal Sanitation.—*Street Cleaning :* Sources and prevention of dirt; factors in work of street cleaning; systems and methods in use; snow removal; cost, and its relation to public health. *Refuse Disposal :* Town and city wastes; trade and factory refuse; analysis; systems in use; possible methods of treatment; cost and results. *Sewage Systems and Sewage Disposal :* Removal of sewage; methods of disposal and their relations to public health; cost and results. *Public Nuisances :* Smoke nuisance, etc.

Sanitary Laws and Regulations.—The statutory constitution of health boards, their powers and duties and those of health officers, state, local and metropolitan. Nuisances : what constitutes a nuisance; how abated; form of procedure; offensive trades, slaughter-houses, smoke nuisance, nuisance from noise etc. Legislation concerning : *A.* Habitations; tenement

houses; sweat shops; lodging houses; cellars; factories and workshops. *B.* Quarantine, federal and state. *C.* Purity of water supply. *D.* Purity of food and drugs. *E.* Infectious diseases; vaccination. *F.* Registration of vital statistics.

CLINICAL INSTRUCTION AND DEMONSTRATIONS.

Clinics on occupation neuroses, chronic lead, arsenic, and mercurial poisoning, alcoholism, etc., in Bellevue Hospital.

Ward demonstrations to small sections on infectious diseases, such as typhoid fever, tuberculosis, malaria, etc., in the wards of Bellevue Hospital, and on contagious diseases in the Willard Parker Hospital.

Visits, with Demonstrations, will be made to Quarantine, North Brothers' Island, and other hospitals possessing isolation rooms and disinfecting plants, to vaccine and antitoxin laboratories, etc.; to the tenement districts, model tenements, lodging-houses, and public and private buildings, illustrating faulty and perfected sanitary engineering; also to the plants of the Street Cleaning Department, and demonstrating the methods of street cleaning and the operation of disposal works.

LABORATORY INSTRUCTION.

Laboratory instruction will be given in the microscopic study of tissues illustrating principally the infectious diseases, as: Tuberculosis, syphilis, leprosy, pneumonia, typhoid fever, diphtheria, malaria, dysentery, yellow fever etc., in courses of twelve two-hour sessions.

[These courses require a general knowledge of the microscopical appearances of diseased tissues, in the absence of which students are recommended to attend the undergraduate course on this subject, which occupies one-half of the college year.]

Bacteriology. — An elementary demonstrative course of twelve two-hour sessions is provided for students who are unfamiliar with bacteriological technique. It includes: Methods of preparing culture media and of making artificial cultures and

inoculation; demonstration of pathogenic *mould fungi* and of cultures of pathogenic bacteria; preparation and examination of stained specimens; discussion of pathogenic action of, and demonstration of action of, antiseptics on bacteria; demonstration of methods of diagnosis of tetanus, tuberculosis and hydrophobia by inoculation; demonstration of elementary methods of bacteriological analysis of air, water and milk.

For students who are familiar with bacteriological technique there will be special advanced courses in practical laboratory work, in one or more of the branches detailed above. These advanced courses require daily attendance during the morning hours for a variable period.

Laboratory instruction is provided in **Clinical Pathology** in courses of six two-hour sessions, including examinations of pus, sputum, fæces (intestinal parasites), urine and blood, attention being also given to secretions from the nose and throat, with special reference to the early recognition of diphtheria.

Six two-hour demonstrations of gross pathology are given, illustrating the principal infectious diseases, cases of poisoning, and of violent and sudden death. The technique of autopsies, general and medico-legal, will also be demonstrated.

Special laboratory instruction is offered in the methods of analysis of water, air, food and beverages, and demonstrations of methods of examination of unwholesome meat, etc.

SUMMARY OF THE PLAN OF INSTRUCTION.

To be read in connection with schedules, pages 91–94.

FIRST YEAR.

1. Anatomy.—One lecture and two recitations each week throughout the year.

Section demonstrations.—Two hours weekly until January, then one hour a week for the remainder of the session.

Embryology.—Six lectures on embryology during the month of March.

Dissection.—Three to six courses of four weeks each, sixteen hours weekly.

2. Physiology.—Two recitations each week. One lecture a week during the first half and two lectures a week during the second half of the session.

3. Chemistry and Physics.—Two lectures each week on physics. Recitations two hours each week on inorganic chemistry. Chemical laboratory four hours each week throughout the session.

4. Histology.—Recitations one hour and laboratory four hours each week throughout the year.

5. Electives.—*a.* Laboratory pharmacology. *b.* Physiological chemistry. *c.* Bacteriology. These courses are open to certain advanced students as described on page 35 of the catalogue.

In the course of the session three written reviews are held in the subjects recited upon. The papers are examined by the professors of the respective branches.

SECOND YEAR.

1. Anatomy. — Surgical and regional anatomy. Three lectures weekly. Recitation one hour each week. One demonstration lecture weekly. Section demonstrations one hour each week. Dissection, one to three courses of four weeks each, eleven hours weekly.

2. Physiology.—Recitations two hours each week during the first half and one hour each week during the second half of the session, including a review of the work of the first year. Two lectures a week during the first half and one lecture a week during the second half of the session.

3. Organic and Physiological Chemistry.—Two lectures each week. Recitation once a week.

Laboratory organic and physiological chemistry. Two hours weekly for the entire session.

4. Histology.—Recitation one hour weekly and laboratory work two hours weekly for one-half of the session.

5. Pathology.— Ten lectures at the beginning of the year.

6. Gross Pathology.—One demonstration weekly, two hours duration, for half the year.

7. Pharmacology.—Laboratory work six hours each week for half the session.

8. Medicine.—Recitation one hour weekly.

Physical Diagnosis.—Three hours weekly for four weeks.

9. Surgery.—Recitations two hours weekly.

10. Obstetrics.— One weekly recitation. Six obstetric clinics (optional).

11. Bacteriology.—Laboratory work six hours a week for one third of the session.

12. Electives.—*a.* Bacteriology. *b.* Materia medica recitations of the third year. *c.* Manikin course in obstetrics. *d.* Obstetrical clinic.

The conditions under which certain students may avail themselves of these electives are stated on page 37 of the catalogue.

The study of the following branches is completed during the

second year, and the examinations on them are final: (1) Anatomy (written and practical); (2) Chemistry and Physics; (3) Pharmacology; (4) Physiology.

THIRD YEAR.

1. **Medicine.**—Recitations two hours each week. Physical diagnosis in sections in the Dispensary. General medical diagnosis or sections at the bedside. General medical clinics two hours each week in Bellevue Hospital. Ward visits in small sections with the Professor and Clinical Professors of Medicine in Bellevue and other hospitals. Eighteen introductory lectures.

2. **Pathology.**—Laboratory work six hours and recitations one hour weekly throughout the year.

3. **Gross Pathology.**—One demonstration weekly throughout the year.

4. **Materia Medica.**—Recitations two hours each week.

5. **Therapeutics.**—Lectures two hours each week; one hour a week bedside teaching in Bellevue Hospital throughout the year. Clinic once a week.

6. **Obstetrics.**—One illustrative lecture weekly. One recitation weekly. One clinic weekly.

7. **Gynæcology.**—Clinic in Gynæcology once a week. Recitation one hour each week. Lectures, six at the beginning of the year.

8. **Surgery.**—Lectures thirty hours. General surgical clinics, two each week. Bedside teaching, diagnosis and history-taking in sections in Bellevue Hospital. Ward work in small sections in Bellevue, St. Francis and the New York hospitals with the Professor and Clinical Professors of Surgery. Recitations on regional surgery two hours weekly.

9. **General Pathology.** — Recitations one hour weekly throughout the year.

10. **Technique of Autopsies.**—One exercise weekly for a portion of the year.

11. **Toxicology.**—Lecture one hour each week.

12. **Diseases of Children.**—Clinic one hour each week.

13. Genito-Urinary Surgery.—Lectures one hour a week until December 1st. Clinics one hour a week after January 1st. Section work one hour a week.

14. Neurology.—One hour a week for the first ten weeks. Clinics one hour a week for the following twenty weeks.

Bedside teaching in four hour periods for four weeks.

15. Dermatology.—Clinic one hour a week for one-third of the year.

16. Laryngology and Rhinology.—Clinic one hour a week for one-third of the year.

17. Ophthalmology.—Lecture one hour a week.

18. Otology.—Clinic one hour a week for one-third of the year.

19. Orthopædic Surgery.—Section work.

FOURTH YEAR.

1. Medicine.—Ward work in the hospitals. General medical clinics twice a week. Exercises in history-taking and in clinical microscopy continued. Twelve lectures. Recitations, conferences.

2. Surgery.—Ward work in the hospitals. General surgical clinics twice a week. Section work and clinics in the special branches. Operative surgery in sections. Recitations.

3. Therapeutics.—Lecture one hour a week after December 1st. Recitation once a week. Clinical instruction in Bellevue Hospital. Section work in the College Dispensary in the treatment of diseases and in the writing of prescriptions.

4. Obstetrics.—Attendance upon cases of confinement. Manikin practice and section work. One obstetric clinic weekly. Recitations.

5. Pathology.—One review recitation a week.

6. Technique of Autopsies.—One exercise a week for a portion of the year.

7. Gynæcology.—Clinic one hour each week and ward demonstrations two hours each week. Recitations.

8. Diseases of Children.—Section teaching three hours each week. Clinic one hour each week. Clinical pathology.

9. Genito-Urinary Surgery.—Lectures one hour a week until December 1st. Clinics one hour a week after January 1st. Section work twice a week throughout the session.

10. Neurology.—Twenty clinics. Section work one hour a week in Bellevue Hospital.

11. Mental Diseases.—Twelve lectures. Clinics once a week for two months.

12. Dermatology.—Section work.

13. Laryngology and Rhinology. — Fifteen lectures. Section work.

14. Ophthalmology.—Ten lectures. Section work.

15. Otology.—Six lectures. Section work.

16. Physiology.—Two lectures a week during the first five weeks of the session on the physiology of the special senses.

17. Orthopædic Surgery.—Fifteen lectures. Section work.

18. Hygiene.—Two lectures a week for two months. Section work and laboratory demonstration.

19. Review Recitations.—For State Board examinations. One hour a week in medicine, surgery, obstetrics and gynæcology, materia medica, therapeutics, chemistry, physiology, anatomy and pathology.

COURSES OF INSTRUCTION AS GIVEN AT ITHACA.

FIRST YEAR.

1. Anatomy. One lecture, two recitations and one demonstration weekly throughout the year. Dissection four to five parts. Approximately two hundred hours. Assistant Professor Kerr and Instructor Mix.

2. General Inorganic Chemistry. Four recitations and five hours of laboratory work (Dr. Kortright) weekly from September 27th to December 22d. Dr. Trevor and Assistants Ebersole, Derby and Turner.

5*a*. Qualitative Chemical Analysis. One recitation and five hours of laboratory work weekly from January 3d to March

22d. Associate Professor Dennis, Dr. Whittelsey and Assistants Fischer, Pettit and

5*b*. **Qualitative and Quantitative Urine Analysis.** One recitation and five hours' laboratory work weekly from March 25th to June 13th. Dr. Whittelsey and Assistant.

2*a*. **Experimental Physics.** Two lectures with demonstrations weekly throughout the year. Professor Nichols and Assistant Professor Merritt.

20. **Physiology.** One lecture and one recitation weekly for the first half-year; two lectures and two recitations weekly for the second half-year. Dr. Fish and Assistants Claypole and Fischer.

1. **Microscopy, Histology and Embryology.** One lecture, one recitation, and six hours' laboratory work weekly throughout the year. (The work in Microscopy begins September 27th, and continues till October 19th; the Histology begins October 22d, and continues until March 22d; the Embryology begins March 25th, and continues until June 13th.) Professor Gage, Dr. Kingsbury and Assistants Ross and Boxmeyer.

The numbers at the head of the courses are those given by the various departments giving the instruction, and are taken from the Cornell University Register.

SECOND YEAR.

2. **Anatomy.** Three lectures during the first and four lectures during the second half-year; one recitation and one demonstration weekly throughout the year. Dissection, three to four parts, approximately two hundred hours. Assistant Professor Kerr and Instructor Mix.

21. **Physiology.** Two lectures weekly during the first half-year; two recitations weekly throughout the year. Laboratory work five hours weekly from September 27th to December 22d. Dr. Fish, Assistants Claypole and Fischer.

21*a*. **Elementary Organic Chemistry.** Two lectures and one recitation weekly for the first half-year. Dr. Orndorff.

13*b*. **Toxicology.** Two and a half hours' laboratory work weekly during the first half-year. Dr. Chamot.

45 and 45*a*. Physiological Chemistry. Two lectures or recitations and five hours of laboratory work weekly for the second half-year. Dr. Orndorff and Mr. Teeple.

26. Materia Medica. Five hours' laboratory work weekly from January 4th to March 24th. Dr. Fish and Assistants Ross and Boxmeyer.

43. Bacteriology. One lecture and five hours of laboratory work weekly throughout the year. Dr. Moore, Instructors Reed and Wright.

9. Medicine. One recitation weekly throughout the year. Dr. Paul R. Brown.

10. Surgery. Two recitations weekly throughout the year. Dr. Coville.

11. Obstetrics. One recitation weekly throughout the year. Dr. Paul R. Brown.

12. Pathology. Ten lectures during the second half-year. Dr. Ewing.

EXAMINATIONS.

REQUIREMENTS FOR ADVANCEMENT IN COURSE.

Students are advanced in course from one year to the next upon passing examinations in the work of that year. As in the academic department of the University, the work of each year is considered final of itself. There is no unnecessary repetition of subjects taught from year to year. Students who have not succeeded in passing all their examinations will be allowed to enter upon the next year's studies, provided they pass examination in the subjects failed in at the beginning of the next year following.

Examinations for advancement in course, graduation and admission to advanced standing are held at the close of the year on the work of the year. In each laboratory course extending through a part of the year only the examination is held at the close of the course.

Examinations for conditioned students and those desiring admission to advanced standing who have not taken the spring examinations are held during the first fortnight of the fall term.

The subjects examined upon are divided into major and minor subjects.

The minor subjects embrace laboratory courses and those in which instruction is given by recitations only.

Subjects of Examination for Admission to the Second Year.

Major Subjects..Anatomy (except the nervous system, viscera and organs of special sense).
Inorganic Chemistry and Physics.
Physiology (except the nervous system and organs of special sense).

Minor Subjects..Histology (except the nervous system and organs of special sense).
Laboratory Inorganic Chemistry.

Conditions allowed (at the spring examinations): 1 Major and 1 Minor; or 2 Minor.

NOTE 1. In each of the laboratory courses of the first and subsequent years, students whose marks fall below a certain percentage will be allowed one re-examination within two weeks of the completion of the course, failing in which they must repeat the laboratory course with the next succeeding section.

Students whose marks fall below this percentage in the chemical laboratory cannot be re-examined, but must repeat the course with the next succeeding section.

NOTE 2. In each of those branches in which recitations are held throughout the year, there shall be two written reviews conducted by tutors and supervised by the professor in charge of the department, and also a final written review conducted by the professor himself at the close of the year. The two written reviews shall be held, the one about the end of November, the other about the close of February.

NOTE 3. All conditions must be successfully passed before entrance into the next succeeding year will be allowed.

Subjects of Examination for Admission to the Third Year.

Major Subjects..Anatomy.
Organic Chemistry.
Physiology.

Minor Subjects..Medicine.
Materia Medica (elective).
Surgery.
Obstetrics.
Bacteriology.
Normal Histology (central nervous system and organs of special sense).
Pathology.
Physical Diagnosis.
Pharmacology.
Laboratory Organic Chemistry.

Conditions allowed: 1 Major and 1 Minor; or 2 Minor subjects.

(See Notes 1, 2 and 3, page 80.)

Subjects of Examination for Admission to the Fourth Year.

Major Subjects..Materia Medica.
Toxicology.
Pathology.
Minor Subjects..Obstetrics and gynæcology.
Medicine.
Surgery.
Pediatrics. } Clinical Paper.
Neurology. }

Conditions allowed: 1 Major and 1 Minor; or 2 Minor.

(See Notes 1, 2 and 3, page 80.)

Subjects of Examination for Graduation at the end of the Fourth Year.

Medicine.
Surgery.
Obstetrics and Gynecology.
Therapeutics.

Special Subjects:

Hygiene.	
Mental Diseases.	
Neurology.	Clinical Paper.
Ophthalmology.	
Otology.	
Rhinology.	
Pediatrics.	
Dermatology.	Clinical Paper.
Genito-Urinary Diseases.	
Orthopædics.	

The recitation average in the primary branches reviewed in this year will be taken into consideration in determining the class standing at the end of the year.

Students conditioned in only one subject at the end of the fourth year will be given an opportunity to make up the condition within two weeks. If the second examination is satisfactory he may receive his degree at the Commencement at Ithaca.

Those conditioned in more than one subject or who fail to pass in the second examination just mentioned must repeat the work of the fourth year.

REQUIREMENTS FOR GRADUATION.

1. Candidates for the degree of doctor of medicine must have studied medicine for four full years in an accredited medical college, and the fourth year at least must have been spent in the Cornell University Medical College.

2. Candidates must present satisfactory evidence of good moral character and of being not less than twenty-one years of age.

3. Candidates must file with the Secretary of the Faculty the Regents' medical student's certificate as evidence of having complied with the requirements for admission (see page 25).

4. Candidates must have dissected at least six parts in anatomy (see page 41). They must, further, have taken the regular course of two weeks at the Mothers' and Babies' or other Hospitals of equal standing.

5. In addition to the yearly examinations above specified for advancement in course, candidates must pass at the end of the fourth year examinations in medicine, surgery, therapeutics, obstetrics and gynæcology, and the special branches as are specified on pages 81 and 82).

6. Candidates rejected at the final examination will not be reexamined until after having repeated their fourth year of study.

7. The degree will not be conferred upon any candidate who absents himself from the public Commencement without the special permission of the Faculty.

8. The Faculty reserves the right to terminate the connection of any student with the institution *at any time* on the ground of what they may deem moral or mental unfitness for the profession, or improper conduct while connected with the College.

REQUIREMENTS FOR LICENSE TO PRACTISE MEDICINE IN THE STATE OF NEW YORK.

All requirements for admission should be filed at least one week before examination.—They are as follows:

1. Evidence that applicant is more than twenty-one years of age (Form 1).

2. Certificate of moral character from not less than two physicians in good standing (Form 2).

3. Evidence that applicant has the general education required preliminary to receiving the degree of bachelor or doctor of medicine in this State (medical student's certificate. See examination handbook).

4. Evidence that applicant has studied medicine not less than four full school years of at least nine months each, in four different calendar years, in a medical school registered as maintaining at the time a satsfactory standard. New York medical schools and New York medical students shall not be discriminated against by the registration of any medical school out of the State, whose minimum graduation standard is less than that fixed by statute for New York medical schools.

The increase in the required course of medical study from three to four years did not take effect till January 1, 1898, and does not apply to students who matriculated before that date and will receive the degree of M.D. before January 1, 1902 (Form 1).

First exemption: "The Regents may in their discretion accept as the equivalent for any part of the third and fourth requirement, evidence of five or more years' practice of medicine, provided that such substitution be specified in the license."

5. Evidence that applicant "has received the degree of bachelor or doctor of medicine from some registered medical school, or a diploma or license conferring full right to practise medicine in some foreign country" (Form 3 of original credentials.)

6. The candidate must pass examinations in anatomy, physiology and hygiene, chemistry, surgery, obstetrics, pathology and diagnosis, therapeutics, practice and materia medica. The questions "shall be the same for all candidates, except that in therapeutics, practice and materia medica all the questions submitted to any candidate shall be chosen from those prepared by the board selected by that candidate and shall be in harmony with the tenets of that school as determined by its State Board of Medical Examiners."

Second exemption: "Applicants examined and licensed by other State examining boards registered by the Regents as maintaining standards not lower than those provided by this article, and applicants who matriculated in a New York State medical school before June 5, 1890, and who received the degree of M.D. from a registered medical school before August 1, 1895, may, without further examination, on payment of $10 to the Regents, and on submitting such evidence as they may require, receive from them an indorsement of their licenses or diplomas, conferring all rights and privileges of a Regents' license issued after examination."

7. A fee of $25 payable in advance.

DIPLOMAS OF LICENTIATE OF THE ROYAL COLLEGE OF PHYSICIANS OF LONDON AND MEMBERSHIP OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

Graduates of the Cornell University Medical College are admitted to the final examination for the diploma of Licentiate of the Royal College of Physicians of London and Membership of the Royal College of Surgeons of England, upon presenting proper certificates that certain conditions applicable to the foreign universities and colleges which are recognized by the examining board have been complied with.

Further information may be obtained from the Secretary of the Board (Mr. F. G. Hallett) at the Examination Hall, Victoria Embankment, London, W. C.

PRIZES.

The Harriet Crocker Alexander prizes, the first of $150, the second of $50, are awarded, the first to the student having the highest record, the second to the student having the next highest record in the Graduating Class.

The prizes were awarded this year as follows :

Frank Clark Yeomans, First Prize.

Gertrude Ward, Second Prize.

HOSPITAL APPOINTMENTS.

The students and graduates of the Cornell University Medical College are entitled to compete on equal terms with those of other colleges for positions on the resident staff of Bellevue Hospital and the other hospitals of the city.

Some of these hospitals are: The City, Harlem, Gouverneur, New York, St. Luke's, Roosevelt, Presbyterian, St. Vincent's, St. Francis', Mount Sinai, German, and Hudson Street hospitals, New York Eye and Ear Infirmary, and the hospitals in Brooklyn and Jersey City, Newark, Paterson etc.

The requirements, the times of examination, and the period of service differ. The details can be learned by application, written

or in person, to the superintendents or the secretaries of the medical boards of the various hospitals, or to the Secretary of the Cornell University Medical College.

CHARGES FOR INSTRUCTION.

First Year.		
Registration[1]	$ 5.00	
Tuition	150.00	
Laboratory fees	35.00	
		$190.00
Second Year.		
Tuition	150.00	
Laboratory fees	30.00	
		180.00
Third Year.		
Tuition	150.00	
Laboratory fees	30.00	
		180.00
Fourth Year.		
Tuition	150.00	
Laboratory fees	25.00	
Graduation fees[2]	25.00	
		200 00

Tickets must be taken out and paid for at the beginning of the session.

FEES FOR SPECIAL STUDENTS.

The Dissecting ticket may be taken out separately after registration.

Registration	$ 5.00
Dissection	15.00
Laboratory course in chemistry	20.00
Laboratory course in normal histology	20.00

[1] The registration fee is payable only once, on entrance.

[2] The graduation fee is payable on registering for graduation. The tuition fees for the first two years at Ithaca are identical with those of the same period in New York. All fees are payable in advance and no rebate will be made.

No remission of laboratory fees will be made because of previous instruction elsewhere in the subjects.

Laboratory course in pathology	$ 20.00
Laboratory course in materia medica	20.00
Operative surgery on the cadaver, including material	25.00
Clinical pathology	20.00
Bacteriology	20.00
Special courses	25.00

SCHOOL OF PRACTICAL HYGIENE AND SANITARY SCIENCE.

Fees for lectures, visits, etc	$25.00
Fees for the pathological laboratory courses	25.00
Fees for the chemical laboratory courses	25.00

Fees must be paid according to the foregoing schedule by all matriculants, including those who have already received the degree of M.D.

SUMMER SCHOOL.

Cornell University will continue during the summer of 1900 the Summer School which has proved of so much advantage.

The courses will cover the period from May 15th to August 1st, and the instruction will be chiefly clinical, with laboratory work and the quizzes added.

The instruction has been especially arranged to economize time and furnish the greatest amount of varied clinical practice possible.

The subjects embrace clinical instruction in medicine, surgery, and the various specialties; laboratory courses and quizzes in anatomy, surgery, materia medica, therapeutics, medicine, obstetrics and gynæcology.

OUTLINE OF THE PLAN OF INSTRUCTION.

The courses in clinical medicine are given at various hospitals and dispensaries by the physicians on duty. Elementary physical diagnosis is provided for those who have completed their second year, and advanced work for third- and fourth-year students.

In surgery the dispensaries will furnish opportunities for the observance and treatment of minor surgical conditions and instructions in bandaging. Advanced students may enter the wards of some of the hospitals and be instructed by the attending physician or surgeon in diagnosis and history-taking.

Clinical courses in the diseases of children, genito-urinary and venereal diseases, dermatology, ophthalmology, otology, gynæcology, diseases of the nose and throat, nervous diseases and orthopædic surgery may be taken at a number of dispensaries.

A course in practical obstetrics is given at the Mothers' and Babies' Hospital.

Upon application a schedule will be furnished the student from which he can choose enough work to completely fill the day from nine in the morning until four in the afternoon in this clinical work. Some of the classes are limited in number, and it is therefore advisable that early application be made.

Laboratory courses are offered in chemistry, normal histology, gross and clinical pathology, autopsies, bacteriology and pharmacology.

In addition to these clinics and laboratory courses, there will be *recitation work* one hour a week in each of the following subjects: anatomy, surgery, materia medica and therapeutics, practice of medicine, obstetrics and gynæcology.

Students who have completed their first year only are advised to choose laboratory courses and recitation work. Students who have completed their first and second years are advised to omit all work in the specialties, and choose courses in physical diagnosis or minor surgery in some dispensary, supplemented by recitations in general medicine or general surgery, or both.

Students who have finished their third year are considered well enough advanced to profit by the courses in the specialties, but are advised to take in addition a course in general medicine.

Students who have completed their fourth year should take up systematically practical instruction in as many of the specialties as the schedule will permit.

While the instruction is intended primarily for the present

members of the Cornell University Medical College, it will be open to both graduates and undergraduates of other recognized medical schools.

Further details of the various courses, their duration, and the fees, can be obtained from the Secretary of the Medical College.

BOARD.

Arrangements are made by the Clerk so that each matriculant of the College will be furnished with lists of good boarding-places at a convenient distance from the College building, at the very low rate of $5 to $6 per week. Further information may be obtained from the Clerk, at his office in the College, or from the Secretary of the Intercollegiate Young Men's Christian Association, 129 Lexington Avenue.

SUGGESTION.

It would be to the advantage of students if they would register a few days in advance of the opening exercises, secure boarding-places and purchase books, so that their studies may not be interrupted in the beginning. The Clerk is in his office every day after September 1, *from* 10 A.M. *to* 2 P.M.

TEXT-BOOKS.

As a rule only the latest editions of text-books should be purchased.

Anatomy—Text-Book, Gerrish, $6.50; Reference Works, Morris, $6.00; Gray, $5.60; Quain, $25.20; Haynes, *Guide to Dissection*, $ .80; Treves, *Surgical Applied Anatomy*, $1.60; Haynes, *Manual of Anatomy*, $2.50.

Physiology — Kirke's *Hand-Book of Physiology*, fifteenth edition, Halleburton, 1899, $3.00; Flint, $4.80; Stewart, $3.75; Foster, $3.60; Landois.

Histology—Stohr, *Text-Book of Histology*, $3.00; Schaefer, *Essentials of Histology*, $3.00.

Bacteriology—Sternberg's *Manual of Bacteriology*, $8.00; Muir and Ritchie, *Manual of Bacteriology*, $3.25.

Chemistry—Witthaus, *Manual of Chemistry*, fifth edition, $3.25; Witthaus, *Laboratory Course*, fourth edition, $1.00; Ganot's *Physics*, $4.00.

Medicine—Second year, Lockwood, $2.50; third year, Musser, *Medical Diagnosis*, $6.00; Thompson's *Practical Medicine*; or for reference, Loomis-Thompson, *American System of Practical Medicine*, $24.00.

Surgery—Tillman, 3 vols., $15.00; *American Text-Book*, $7.00; Parks, *Surgery*, 2 vols., $9.00; Stimson, *Fractures and Dislocations*, $5.00; Stimson, *Operative Surgery*, $3.00; Dennis, *System of Surgery*, $6.00 per volume; Parks, *Surgery*, 1 vol. ed., $6.00.

Genito-Urinary—White and Martin, $6.00; Hyde and Montgomery, $2.50; Keyes and Chetwood, $2.75.

Obstetrics—Hirst's *Obstetrics*, $5.00; Winckel, $5.00; Dorland, $2.50.

Gynæcology—Penrose, $3.75; Dudley, $5.00; Kelly, $15.00.

Materia Medica and Therapeutics—White, *Materia Medica and Therapeutics*, $3.00; Coleman, *Syllabus of Materia Medica*, $1.00; Hare, *Practical Therapeutics*, $4.00; Thompson, *Practical Dietetics*, $5.00.

Pathology—Delafield and Prudden, *Pathological Anatomy and Histology*, $5.00; Orth, *Pathological Diagnosis* (Trans. of Sydenhan Society); Ziegler, *General Pathology*, $5.00.

Dermatology—J. Nevins Hyde, $4.50; Jackson, $2.50.

Ophthalmology—Noyes, $5,00; De Schweinitz, $4.00; Swanzy, $3.00; Jackson, $3.50; Suter, $1.50.

Otology—Bacon and Blake on the Ear, $2.00; Politzer, $—Macewen, $—

Nervous Diseases—Dana, $3.50; Gower, $8.00; Dercum, $6.00.

Diseases of Children—Medical Diseases of Infancy and Childhood, Williams, $2.50; *An American Text-Book of the Diseases of Children*, Starr, $7.00.

Goulds, *Student's Medical Dictionary*, $3.25.

Dissecting Cases—$2.00 to $5.00.

Text-books, etc., may be obtained from the Clerk at the College.

FIRST-YEAR CLASS—1900–1901

Hour	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
9	*A.* Histology *B.* *C.* Physiology	Physiology Lecture Prof. Flint (until Jan. 1)	*A.* Physiology *B.* Histology *C.* Anat. Dem. (until Jan. 1)	Physiology Lecture Prof. Flint	*A.* Histology *B.* Anat. Dem. (until Jan. 1) *C.*	*A.* Anat. Dem. (until Jan. 1) *B.* *C.* Histology
10	*A.* Anatomy *B.* Chemistry *C.*	*A.* *B.* Anatomy. *C.* Chemistry	*A.* Chemistry *B.* Physiology *C.* Anatomy	*A.* Anatomy *B.* Chemistry *C.* Physiology	*A.* Physiology *B.* Anatomy *C.* Chemistry	*A.* Chemistry *B.* Physiology *C.* Anatomy
11	*A.* *B.* *C.*	*A.* *B.* *C.* Anat. Dem.	*A.* *B.* *C.* Histology.	*A.* *B.* Anat. Dem. *C.*	Anatomy Lecture Prof. Woolsey	*A.* Anat. Dem. *B.* Histology *C.*
12						
1	Histology Laboratory	Embryology ½ class Oct. 9 to Nov. 13	*Dissection*	*Dissection*	Histology Laboratory	*Dissection* (½ class) Chemical Laboratory (½ class)
2	Histology Laboratory	*Dissection*	*Dissection*	*Dissection*	Histology Laboratory	*Dissection* (½ class) Chemical Laboratory (½ class)
3	Physics Lecture Prof. Witthaus	Chemical Laboratory (½ class, 3.30) *Dissection* (½ class)	*Dissection* (½ class) Chemical Laboratory (½ class, 3.30)	Chemical Laboratory (½ class, 3.30) *Dissection* (½ class)	Physics Lecture Prof. Witthaus	*Dissection*
4	*Dissection*	Chemical Laboratory (½ class, 4.30) *Dissection* (½ class)	*Dissection* (½ class) Chemical Laboratory (½ class, 430)	Chemical Laboratory (½ class, 4.30) *Dissection* (½ class)	*Dissection*	*Dissection*
5	*Dissection*	Chemical Laboratory (½ class, 5.30) *Dissection* (½ class)	*Dissection* (½ class) Chemical Laboratory (½ class, 5.30)	Chemical Laboratory (½ class, 5.30) *Dissection* (½ class)	*Dissection*	*Dissection*

SECOND-YEAR CLASS—1900–1901

Hour	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
9	Physiology Lecture Prof. Flint (Oct.–Dec.)	*A.* Anatomy *B.* Physiology *C.* Chemistry	Physiology Lecture Prof. Flint	*B.* Chemistry *C.* Anatomy *A.* Physiology (to Jan. 1)	*C.* Physiology *A.* Obstetrics *B.* Anatomy	*A.* Obstetrics *B.* Chemistry *C.* Physiology
10	*A.* Physiology *B.* Medicine *C.* Surgery	Anatomy Lecture Prof. Woolsey	Anatomy Lecture Prof. Woolsey	Anatomy Lecture Prof. Woolsey	Anatomy Dem. Lecture Prof. Haynes	*B.* Physiology *C.* *A.* Obstetrics
11	*A.* Surgery *B.* Anat. Dem. *C.* Medicine	* Physical Diagnosis	*A.* Anat. Dem. *B.* *C.* Surgery.	* Physical Diagnosis	*A.* *B.* Surgery *C.* Anat. Dem.	* Physical Diagnosis
12						
1	Phys. Chem. Lab'y	Materia Medica (½ class) Bacteriology (½ class)	Histology (Oct.–Jan.) Laboratory *Dissection*	Materia Medica (½ class) Bacteriology (½ class)	Phys. Chem. Lab'y	Bacteriology (½ class)
2	Phys. Chem. Lab'y	Materia Medica (½ class) Bacteriology (½ class)	Histology Laboratory (Oct.–Jan.) *Dissection*	Materia Medica (½ class) Bacteriology (½ class)	Phys. Chem. Lab'y	Bacteriology (½ class)
3	Pathology Lecture (Oct.–Nov.) Prof. Ewing *Dissection*	Pathology Lecture (Oct.–Nov.) Prof. Ewing *Dissection*	Pathology (Oct.–Nov.) Prof. Ewing *Dissection*	*Dissection*	*Dissection*	*Dissection*
4	*Dissection*	*Dissection*	*Dissection*	*Dissection*	*Dissection*	*Dissection*
5	*Dissection*	Chemistry Lecture Prof. Witthaus	Chemistry Lecture Prof. Witthaus	*Dissection*	*Dissection*	*Dissection*

* Section work.

THIRD-YEAR CLASS—1900–1901

Hour	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
9	*A*. Medicine *B*. Surgery *C*. Materia Medica	*A*. Materia Medica *B*. Medicine *C*. Surgery	*A*. Surgery *B*. Materia Medica *C*. Medicine	*A*. Medicine *B*. Surgery *C*. Materia Medica	*B*. Medicine *C*. Surgery *A*. Materia Medica	*A*. Surgery *B*. Materia Medica *C*. Medicine
10	Pathological Lab'y Prof. Ewing	Gross Pathology (½ class)	Pathological Lab'y Prof. Ewing	Clinical Pathology (½ class) Gross Pathology (½ class)	Pathological Lab'y Prof. Ewing	Clinical Pathology (½ class) Gross Pathology (½ class)
11	Pathological Lab'y Prof. Ewing	Gross Pathology (½ class)	Pathological Lab'y Prof. Ewing	Clinical Pathology (½ class) Gross Pathology (½ class)	Pathological Lab'y Prof. Ewing	Clinical Pathology (½ class) Gross Pathology (½ class)
12						
1	*Section Work*	*Section Work*	*Section Work*	*Section Work*	*Section Work*	*Section Work*
2	Therapeutics Lecture Prof. Loomis	*A*. *B*. Obstetrics *C*. Pathology	Surgery Clinic Prof. Stimson	Pediatrics Clinic Prof. Winters	*A*. Pathology *B*. *C*. Obstetrics	
3	Obstetrics and Gynæcology Prof. Polk	Medicine Clinic Prof. Thompson	Surgery Clinic (Oct. 10–Dec.) Prof. Dennis Genito-Urinary Clinic (Jan.–Apr.) Prof. Alexander	Surgery Clinic Profs. Stimson, Woolsey, Gwyer	Therapeutics Clinic Prof. Loomis	
4	Medicine Lecture (Oct.–Dec.) Prof. Thompson * Toxicology Lecture (Dec.–April) Prof. Witthaus	Obstetrics Clinic Prof. Edgar		Medicine Lecture (Oct. 4–Dec. 6) Prof. Thompson Therapeutics Lecture (Jan.–Apr.) Prof. Loomis	Neurology Lecture (Oct. 5–Nov. 16) Prof. Dana Neurology Clinic (Nov. 23–May 3) Prof. Dana	
5	Surgery Lecture (Oct.–Dec.) Prof. Stimson *Section Work* (Feb.–Mar.)	Obstetrics Clinic Prof. Edgar	Obstetrics Lecture Prof. Edgar	Surgery Lecture Prof. Stimson (Oct. 1–Dec. 7)	Surgery Lecture (Oct. 5–Dec. 7) Prof. Stimson	

* 18 Lectures.

FOURTH-YEAR CLASS—1900–1901

Hour	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
9	Oct.–Nov. Physiology Lecture (Special senses) Prof. Flint Nov.–Apr. *A*. Chemistry Dr. Riggs *B*. Physiology Dr. Ives	*A*. Therapeutics Dr. Shelby *B*. Surgery Prof. Bolton	Oct.–Nov. Physiology Lecture (Special senses) Prof. Flint Nov.–Apr. *A*. Physiology Dr. Ives *B*. Chemistry Dr. Riggs	*A*. Obstetrics and Gynæcology Dr. Hamlen *B*. Pathology	*A*. Pathology Dr. Norris *B*. Obstetrics and Gynæcology Dr. Hamlen	*A*. Anatomy Dr. Stone *B*. Medicine Prof. Conner
10	*A*. Surgery Prof. Bolton *B*. Therapeutics Dr. Shelby	*Section Work*	*A*. Medicine Prof. Conner *B*. Anatomy Dr. Stone	*Section Work*		*Section Work*
11	*Section Work*	*Section Work*	*Section Work*	*Section Work*	*Section Work*	*Section Work*
12						
1	*Section Work*	*Section Work*	*Section Work*	Oct.–Dec. Mental Diseases Lecture Prof. Hamilton Jan.–Apr. Orthopedics Clinic Prof. Shaffer	*Section Work*	
2	*Section Work*	*Section Work*	Surgery Clinic Prof. Stimson	Pediatrics Clinic Prof. Winters	*Section Work*	*Section Work*
3	Obstetrics and Gynæcology Clinic Prof. Polk Bellevue Hosp.	Medicine Clinic Prof. Thompson	Oct.–Dec. Surgery Clinic Prof. Dennis Jan.–Apr. Genito-Urinary Clinic Prof. Alexander	Surgery Clinic Prof. Stimson, Woolsey, Gwyer	Therapeutics Lecture Prof. Loomis	*Section Work*
4	Oct.–Nov. Otology Lecture Prof. Bacon Jan.–Mar. Laryngology Lecture Prof. Knight	Obstetrics Clinic Prof. Edgar	Oct.–Jan. Therapeutics Lecture Prof. Loomis	Oct.–Dec. Ophthalmol. Lecture Prof. Bull Jan.–Apr. Therapeutics Lecture Prof. Loomis	Oct.–Dec. Medicine Lecture Prof. Thompson Jan.–Apr. Neurology Clinic Prof. Dana	
5	Oct.–Nov. Surgery Lecture Prof. Stimson Jan.–Mar. *Section Work*	Obstetrics Clinics Prof. Edgar	Obstetrics Lecture Prof. Edgar	Oct.–Dec. Surgery Lecture Prof. Stimson Jan.–Apr. Hygiene Lecture Dr. Williams	Oct.–Dec. Surgery Lecture Prof. Stimson	

The University reserves to itself the right to alter these schedules as exigencies may require.

MATRICULANTS IN NEW YORK.

Abel, Samuel.....New York City
Adler, Marion Samuel.....New York City
Altschul, Jehuda Hillel.....New York City
Ambos, Carl Ludwig, Ph.G.....New York City
Amster, Julius Louis.....New York City
Asserson, Mary Alice.....Brooklyn, N. Y.
Atwater, Henry Harrison, Jr.....Brooklyn, N. Y.
Backus, Harold Simeon.....Andover, Conn.
Bailey, Percival Dee.....New York City
Bailey, Viola Jane.....Carolina, R. I.
Baldwin, Jane North.....Saranac Lake, N. Y.
Baldwin, Janette.....Bethel, Conn.
Banker, Ernest Ensign.....Ft. Edward, N. Y.
Barnes, Ida Bertha.....New York City
Bartlett, Robert Lander, M.D., D.M.D.....New York City
Bassin, John Nicholas.....New York City
Beck, Ehrich Carl.....New York City
Beckel, Melville Jerome.....New York City
Becket, George Crocket.....New York City
Behring, Joshua Aaron.....New York City
Benton, Julian Juriah.....Oakland, Cal.
Bernstein, Abraham.....Binghampton, N. Y.
Bernstein, Israel Isaac.....New York City
Best, Jean Isabel.....Washington, Pa.
Boettiger, Carl.....L. I. City, N. Y.
Bradford, Stella Stevens, B.A.....Montclair, N. J.
Brecht, Frederick William, Ph.G.....Brooklyn, N. Y.
Brewster, Margaret Powell.....New York City
Britton, John.....New York City
Brodman, Henry.....New York City

Brown, Mary Hess.....Columbus, O.
Brown, Christopher William.....Brooklyn, N. Y.
Brunor, Emile, Ph.G., Ph.D.....New York City
Buck, Guerdon Conde, B.S.....Platteville, Wis.
Bunnell, George Lincoln, Ph.B.....Bridgeport, Conn.
Burns, Geoffrey Chas. Henry.....City Island, N. Y.
Butterworth, Mary Edna.....Morristown, N. J.
Callahan, Denis George, A.B.....Brooklyn, N. Y.
Cameron, Irving Gourmotte.....Brooklyn, N. Y.
Cantle, William Henry.....Norwich, Conn.
Chasins, Charles Louis.....New York City
Clark, Coryell.....Nichols, N. Y.
Cohen, Frances, A.B.....New York City
Coolidge, Emelyn Lincoln.....Boston, Mass.
Corrigan, George Francis, M.D.....New York City
Costigan, Leo Hubert.....New York City
Davidson, Louis Leopold.....New York City
de la Motte, Anna Christesen.....Brooklyn, N. Y.
Dennis, Helen, B.A.....Newark, N. J.
Divine, Alice.....Ellenville, N. Y.
Dolan, Paul, A.B.....Brooklyn, N. Y.
Dosh, Louis Philippe.....New York City
Dunning, Emily, B.S.....New York City
Druskin, Samuel Jerome, B.S.....New York City
Edlich, Theodore Julius, Ph.G.....New York City
Ehrlich, Simon.....New York City
Eaton, Alvin Richard, Jr.....Elizabeth, N. J.
Edwards, Franklyn Ellsworth, M.D.....New York City
Ehlers, Edmund Armeneius.....New York City
Epstein, Sigmund.....New York City
Evans, Newton Gurdon, B.S.....Battle Creek, N. Y.
Farrar, Lilian Keturah Pond, A.B.....Newtown Centre, Mass.
Farrell, Leo Francis.....Pawtucket, R. I.
Fincke, Harry Starke, Ph. G.....L. I. City, N. Y.
Finley, Caroline Sandford.....New York City
Fischer, Henry John, Ph.G.....New York City

Fisher, Archie Max.....Spencer, N. Y.
FitzGerald, Aaron Boylan.....Newark, N. J.
Fleming, Mark L.....Summit, N. J.
Flynn, Frederick Laurence.....New York City
Frankel, Julius.....New York City
Freedman, Louis.....New York City
Fried, Herman.....New York City
Frye, Carl.....New York City
Geddes, Susan Baker.....Newark, N. J.
Gettinger, Joseph Hermann.....New York City
Gillies, Charles Holmes, M.D.....Nyack, N.Y.
Gingold, David.....New York City
Ginzburg, Isidor.....New York City
Glasgow, Maud.....New York City
Glazebrook, Francis Henry.....Elizabeth, N. J.
Glucksman, George.....New York City
Good, George.....Jersey City, N. J.
Gorton, James Treat, B.S.....Yonkers, N. Y.
Greene, James Sonnet.....New York City
Green, Arthur Randolph.....New York City
Greenberg, Augustus Abraham.....New York City
Gregory, Alice.....New York City
Grund, Marie, A.B.....New York City
Gundacker, Henry John, A.B.....New York City
Gutman, Joseph.....New York City
Hammer, William Jacob.....Elizabeth, N. J.
Hamill, John Dunlap.....New York City
Hand, Edward.....Elizabeth, N. J.
Heimbecker, Winifred.....New York City
Henning, Walter Hannibal.....New York City
Hess, Ralph Jones, B.S.....Salamanca, N. Y.
Hertz, Julius Jacob.....New York City
Heuser, Gerhard William.....Brooklyn, N. Y.
Hicks, Shirley Nathaniel Combs, B.S...Rockville Centre, N. Y.
Hildreth, Edward Raymond, A.B.....Bridgehampton, N. Y.
Hilkowich, Abe Maurice.....New York City

Hirsch, Henry.....New York City
Hitchcock, Ethel Olivia Hunter.....New York City
Hoerle, Horace Poinier.....Ridgewood, N. J.
Holt, Corliss Mason.....Fishkill-on-the-Hudson, N. Y.
Horowicz, Bruno.....New York City
Hughes, John Howard.....Jersey City, N. J.
Isaacs, Julius.....Brooklyn, N. Y.
Jacknowitz, Morris Arthur.....New York City
Janson, Christian William.....Brooklyn, N. Y.
Johnson, Dwight Fenn.....Wolcott, N. Y.
Joslin, Mary Suviah.....New York City.
Joyce, Leo Harold.....Bath Beach, N. Y.
Kahn, Robert Johnston.....Inwood, N. Y.
Kaplan, David Michael.....New York City
Kern, James Valentine.....New York City
Kilbane, Edward Francis.....New York City
Kingston, Augustus Thomas, B.A.....New York City
Klemann, George Francis.....New York City
Kleinbaum, Edward.....New York City
Knaus, Charles William.....New York City
Koehler, Leopold Jacob.....New York City
Kommel, Louis Moses.....New York City
Landsman, Arthur Armin, Ph.G.....New York City
Lawrance, Elliott Wagstaff.....Rochester, N. Y.
Levy, Abraham Aaron.....New York City
Lewin, Samuel Aaron.....New York City
Lewitt, Abraham.....New York City
Licht, Louis Frederick, Ph.G.....Gundeshofer, Germany
Lippmann, Thomas Charles, Ph.G.....Sag Harbor, N. Y.
Livingston, Elizabeth Handford.....Brooklyn, N. Y.
Lubman, Max.....New York City
Lysaght, Bella Bernadette.....Brooklyn, N. Y.
McCague, David John.....New York City
McDonald, Robert Francis.....New York City
McLean, John Howell, Jr., A.B., M.D. ....Fort Worth, Texas
McMenamin, Thomas Daniel.....Bath, N. Y.

MacMillan, Mary, A.B.....New York City
McMillan, Katherine, M.D.....Durham Centre, N. B.
MacLeod, Douglas Murdock.....Valley Field, P. E. I.
Magill, William Henry, Ph.B.....Providence, R. I.
Malisoff, Abraham.....New York City
Mandel, Louis Jerome.....New York City
Manisof, Joseph.....New York City
Martin, James Francis, A.B.....New York City
Maxson, Cullen B.....Jersey City, N. J.
Mayer, Ethel, A.B.....New York City
Meacham, Leslie James.....New York City
Merrill, Henry Putnam, Jr.....Portland, Me.
Milbank, Samuel.....New York City
Miltimore, Dean, B.S.....Catskill, N. Y.
Mills, Eugene Frederick.....Brooklyn, N. Y.
Mislig, Michael, Ph.G.....New York City
Moses, Chester Davis, E. E.....Cortland, N. Y.
Moskowitz, Abraham.....Brooklyn, N. Y.
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Nalitsky, David Isaac.....Bayonne, N. J.
Needham, George G., A.M., A.B., M.D., Ph.G..New York City
Newman, Grace.....Brooklyn, N. Y.
Norton, Edward Sylvester.....Clifton, N. J.
O'Flaherty, Ellen Pembroke.....Hartford, Conn.
O'Grady, Eliza.....Eastport, Me.
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Pearson, Henry, B.S.....Tuscaloosa, Ala.
Pfeiffer, William.....Brooklyn, N. Y.
Pierson, Farrand Baker, A.B.....Brooklyn, N. Y.
Rachlin, Nathan Hale.....Brooklyn, N. Y.
Raphaelson, Samuel Joshua, B.S.....New York City
Rea, Charles Lee.....Carrollton, Me.
Rissmeier, Charles Frederick.....New York City
Ritter, Isidor.....New York City
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Roof, Stephen White.....New York City

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Rosenberg, Herman.....New York City
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Ruch, Valentine, Jr.....Englewood, N. J.
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Schirmer, Emilie Carolina.....Brooklyn, N. Y.
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Schmidt, Frederick George Edward..Herzberg a. Harz, Germany
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Stigner, Per.....New York City
Streep, Isaac.....New York City
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Thornton, Jessie Maud.....Hillsville, Va.
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Tirman, Samuel.....New York City
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Underhill, Elizabeth Colden..... ...Poughkeepsie, N. Y.
Vogt, Walter Eugene.....Brooklyn, N. Y.
von Roeder, Ludwig.....Yorktown, Texas
von Sholly, Anna Irene, A.B.....Flushing, N. Y.
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Weinberg, Joseph Elias.....New York City
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Winick, Samuel.....New York City
Wise, Arthur Heston.....New York City
Woelfle, Henry Ewald.....Roseland, N. J.
Wohl, Albert Arthur.....New York City
Wolfert, Ludwig Paul Otto..... New York City
Wolff, Harold Alfred.....Brooklyn, N. Y.
Wyatt, Thomas Hall.....Brooklyn, N. Y.
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Zeiner, Eugene Jerome, Ph.G.....New York City
Ziporkes, William Jerome.....New York City
Zipser, Benjamin.....New York City
Zucker, Morris, Ph.G.....New York City

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Bauder, George Washington.....Middletown, N. Y.
Beckwith, Mary Winifred.....Ithaca, N. Y.
Bedford, Alleta Langdon.....Brooklyn, N. Y.
Bliss, Theodore.....Troy, N. Y.
Bloomingdale, Gertrude.....Alabama, N. Y.
Bowen, Willis Elliot, Ph.G.....Churchville, N. Y.
Brown, Ralph Minthorne.....Ithaca, N. Y.
Bugbee, Alice Elmina Gates.....Gloversville, N. Y.
Bullard, Marguerite Jane.....Providence, R. I.
Carter, Helen Louise.....Newark, N. J.
Canfield, Amos.....Van Etten, N. Y.
Chapin, Charles Willard.....Palmyra, N. Y.
Claypole, Agnes Mary, M.S., Ph.D.....Akron, O.
Claypole, Edith Jane, Ph.B., M.S.....Akron, O.
Cleghorn, Guy Forsythe.....Green Island, N. Y.
Cohen, Rose, M.E., B.E.....New York City.
Cole, Thomas Folwell.....Ovid, N. Y.
Coryell, Clarence Cattin.....Ithaca, N. Y.
Cunniffe, Edward Rutherford.....Port Jervis, N. Y.
Demarest, Ruth.....Nyack, N. Y.
Doughty, Phebe Van Vlack, A.B., Ph.B.....Matteawan, N. J.
Dyer, Frank Merritt.....Binghamton, N. Y.
Everett, Frederick.....Potsdam, N. Y.
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Ferry, Perry Lawson.....Preble, Ind.
Fish, Emmett Grant.....Mecklenberg, N. Y.
Fisher, Carl De Witt.....Johnstown, Pa.
Folley, Etta.....Newark, N. J.
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Gilfillan, Elizabeth Riddle.....Washington, D.C.
Goehle, Otto Louis.....Buffalo, N. Y.

Gould, Clark Sumner.....Walton, N. Y.
Hoover, Walter Wells.....Wellsville, Pa.
Huntoon, Frank McElroy.....Port Byron, N. J.
Jagle, Elizabeth Carlisle.....Brooklyn, N. Y.
Johnston, Harry Isaac.....Ovid, N. Y.
Keeler, Lynn Huntington.....Moravia, N. Y.
Kingsbury, Benjamin Freeman, A.B., M.S., Ph.D..Defiance, O.
Knipe, Norman Leslie.....Norristown, Pa.
Kuyle, Thompson Galbraith.....Ithaca, N. Y.
Losee, Mace Anderson.....Livingstonville, N. Y.
Ludwig, Robert Francis.....Chicopee, Mass.
McClary, Samuel, 3d.....Wilmington, Del.
McDonald, Robert Stevenson, Ph.B.....London, Ont.
Mathewson, Edward Simon.....Cortland, N. Y.
Mix, Charles Melville, A.B.....Friendship, N. Y.
Mohan, John Francis.....Allegheny, Pa.
Mood, Inez Leonore.....Newfield, N. Y.
Moody, Mary Grace.....New Haven, Conn.
Mount, Louis Burgh.....Troy, N. Y.
Munson, Arley Isabel.....Brooklyn, N. Y.
Myers, Burton Dorr, Ph.D.....Attica, O.
Nelson, Staley Lyman.....Hinsdale, N. Y.
Niles, Walter Lindsay.....Lebanon, N. Y.
Ormsby, Margaret Louise.....Norwich, Conn.
Page, Sophie Ellen.....Bethany, Pa.
Palmer, William Hailes.....Mechanicsville, N. Y.
Parker, Jason Samuel.....Lyons, N. Y.
Pierson, John Corbin.....New York City
Pounds, Thomas Canfield.....Breesport, N. Y.
Quigley, James Knight.....Trumannsburgh, N. Y.
Reed, Thurlow Weed.....Hornellsvile, N. Y.
Searing, Benjamin Haff.....Brooklyn, N. Y.
Sears, Keith.....Searsburg, N. Y.
Stevenson, Willis Mack.....S. W. Oswego, N. Y.
Stone, Charles Lucius.....Troy, N. Y.
Storck, Edward Hugo.....Buffalo, N. Y.

Stroud, Bert Brenette, B.S., D.Sc.....Ithaca, N. Y.
Swaze, Clayton Isaac.....Lake Ridge, N. Y.
Thompson, Carrie Wilber.....Highland Falls, N. Y.
Todd, Leona Estella.....Rochester, N. Y.
Tompkins, George Nelson.....Sing Sing, N. Y.
Treat, Lillian Amelia.....Auburn, N. Y.
Van Pelt, Harvey Loren.....Ithaca, N. Y.
Vose, Roy Madeville.....Ithaca, N. Y.
Wanzer, Esther May.....Ithaca, N. Y.
Weber, Edward William.....Mt. Vernon, N. Y.
Wilson, Willets, Ph.G.....Ithaca, N. Y.
Woodward, Mabel Hadley.....Rochester, N. Y.
Wright, Floyd Robins.....Ithaca, N. Y.

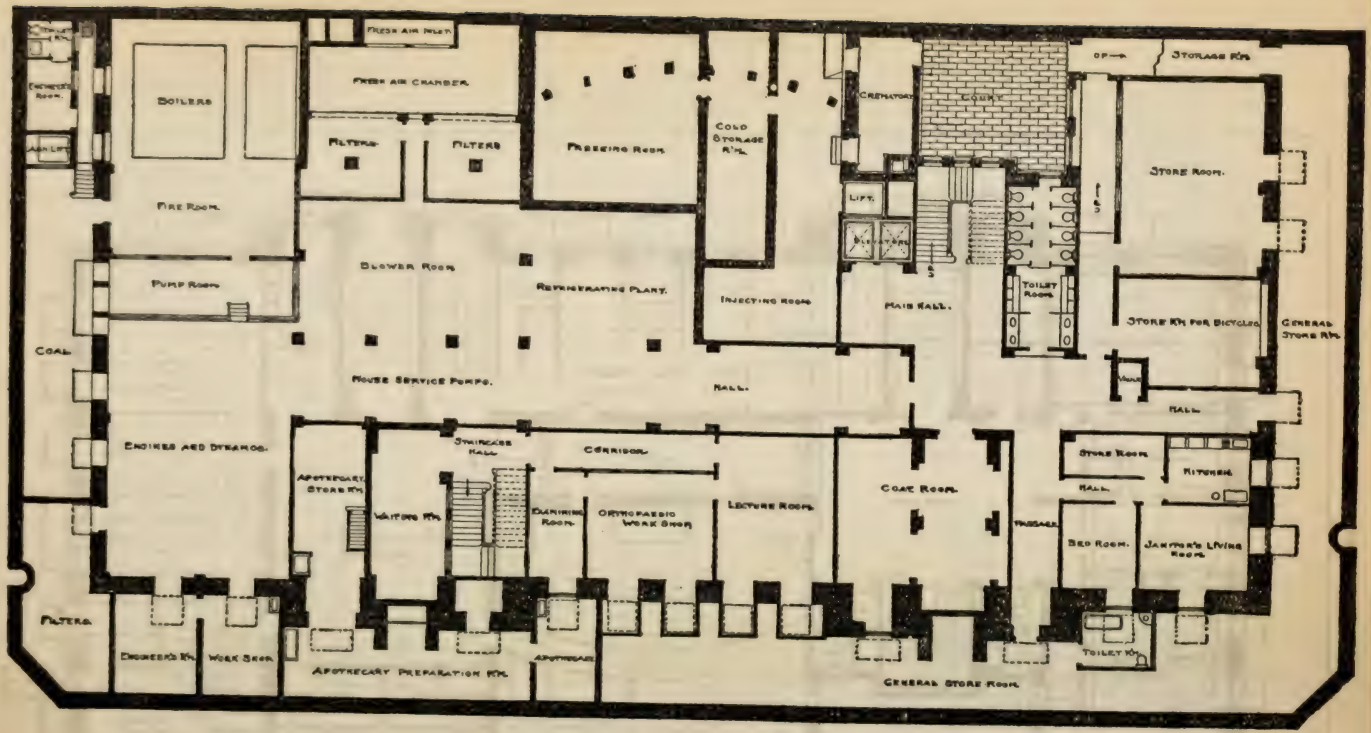
GRADUATES.

JUNE 6, 1900.

Carl Ludwig Ambos,
Viola Jane Bailey,
Jane North Baldwin,
Mary Hess Brown,
George Lincoln Bunnell,
George Crocket Becket,
Guerdon Conde Buck,
Frances Cohen,
Emelyn Lincoln Coolidge,
Coryell Clark,
Allie Divine,
Helen Dennis,
Anna Christesen De La Motte,
Cornelius Abram DeMund,
Newton Guerdon Evans,
Julius Frankel,
Lilian Keturah Pond Farrar,
Henry John Fischer,
Marie Grund,
Jacob Gutman,
James Treat Gorton,
David Gingold,
Francis Henry Glazebrook,
Isidor Ginzburg,
Ralph Jones Hess,
Edward Hand,
Shirley Nathaniel Combes Hicks,
David Michael Kaplan,
Abraham Lewitt,
Arthur Armin Landsman,
Max Lubman,
Louis Jerome Mandel,
Abraham Malisoff,
Joseph Augustus Mulholland,
Henry Putnam Merrill, Jr.,
Joseph Manisof,
Thomas Daniel McMenamin.

Charles Lee Rea,
Aaron Joshua Rosenberg,
Nathan Hale Rachlin,
Edith Estella Shears,
Harriet Douglas Whetton Showers,
Emilie Caroline Schirmer,
Michael Joseph Sullivan,
William Henry Sutherland,
Frederick George Edward Schmidt,
Charles Silk,
William Herbert Smith,
Henry Jesse Spalding,
Elizabeth Colden Underhill,
Ludwig Robert Von Roeder,
Ludwig Paul Otto Woelfert,
Samuel Winick,
Gertrude Ward,
Joseph Storer Wheelwright,
James Wallace Wilkes,
Joseph Elias Weinberg,
Frank Clark Yeomans,

NOTE. Thirty-five hospital appointments were obtained in competitive examinations by the members of this class. Four resigned and thirty-one are now serving.

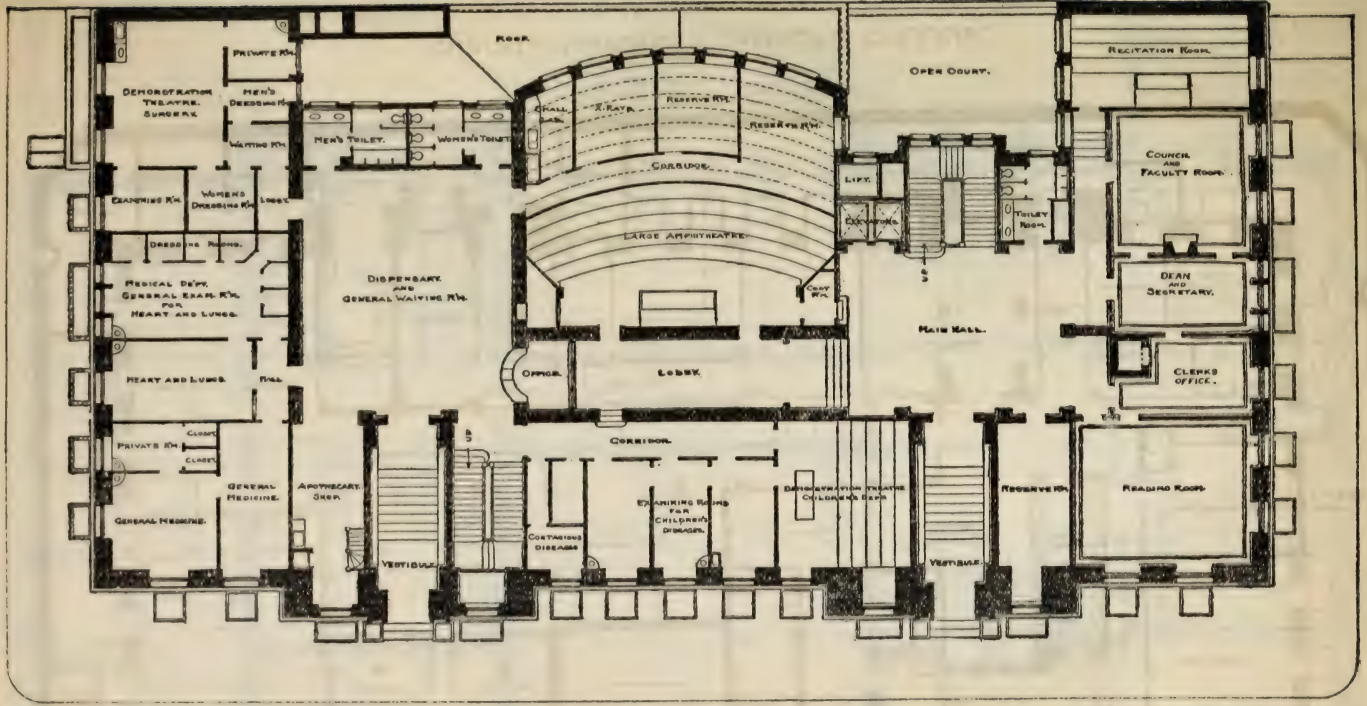


CORNELL UNIVERSITY MEDICAL COLLEGE

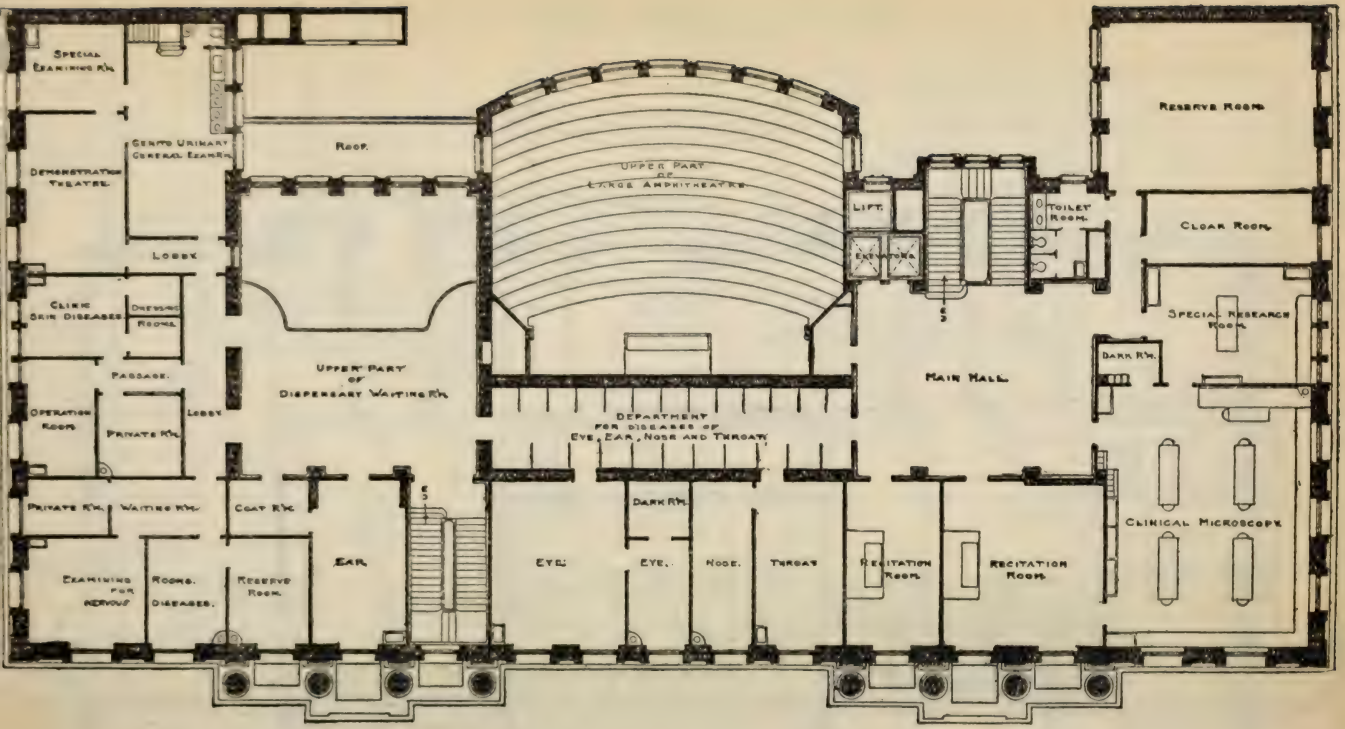
PLAN OF BASEMENT.

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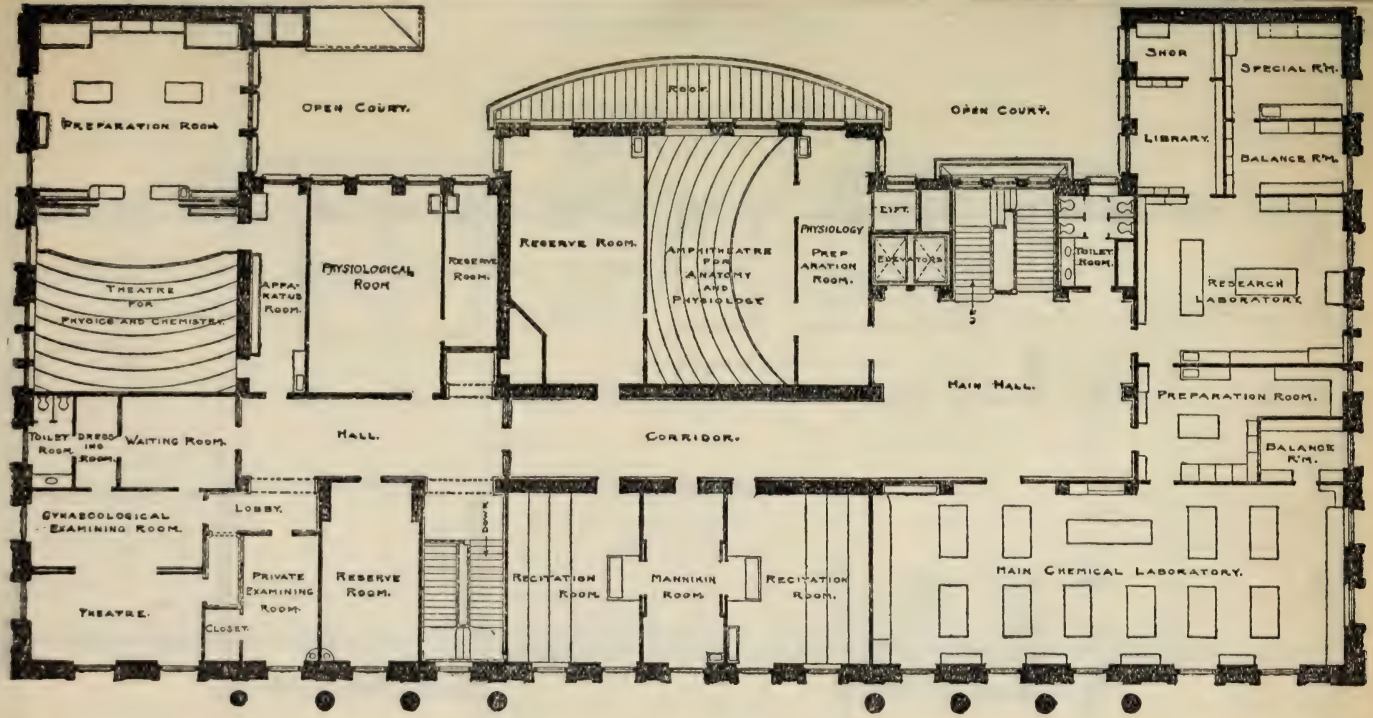
McKIM, MEAD AND WHITE, ARCHITECTS.



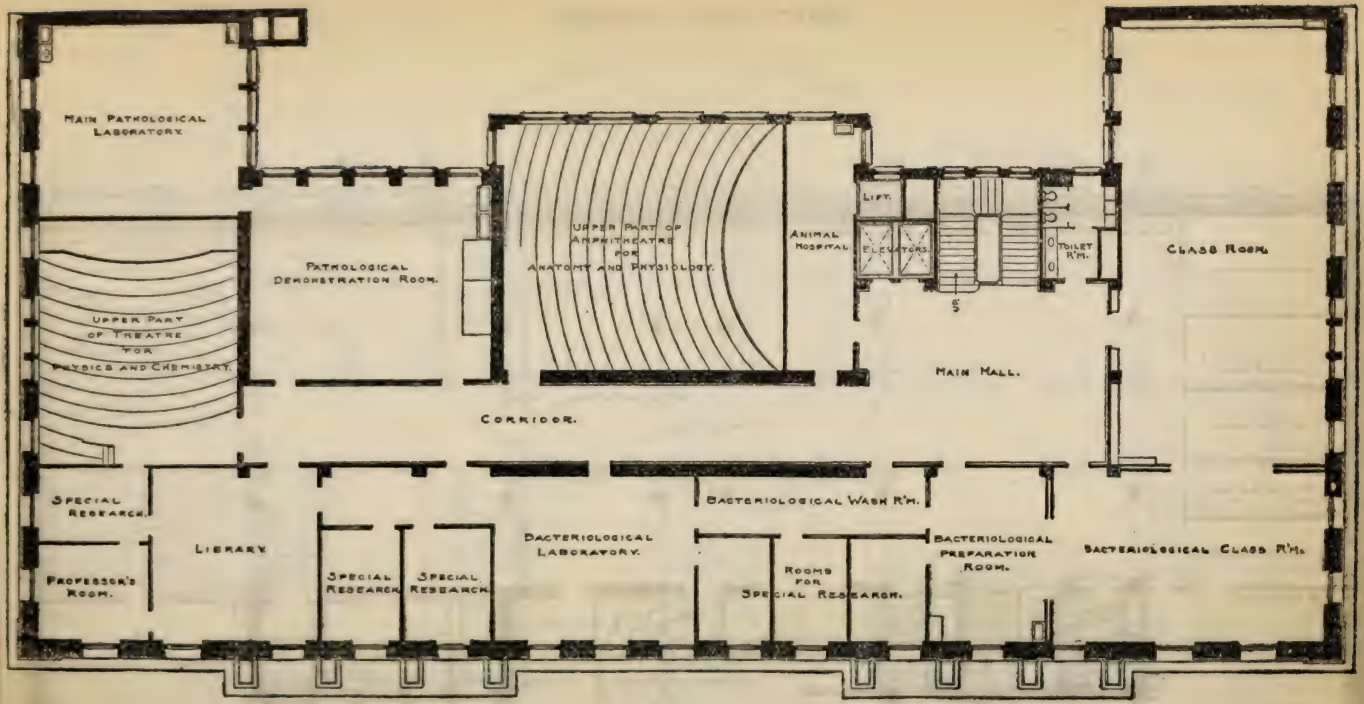
PLAN OF FIRST FLOOR



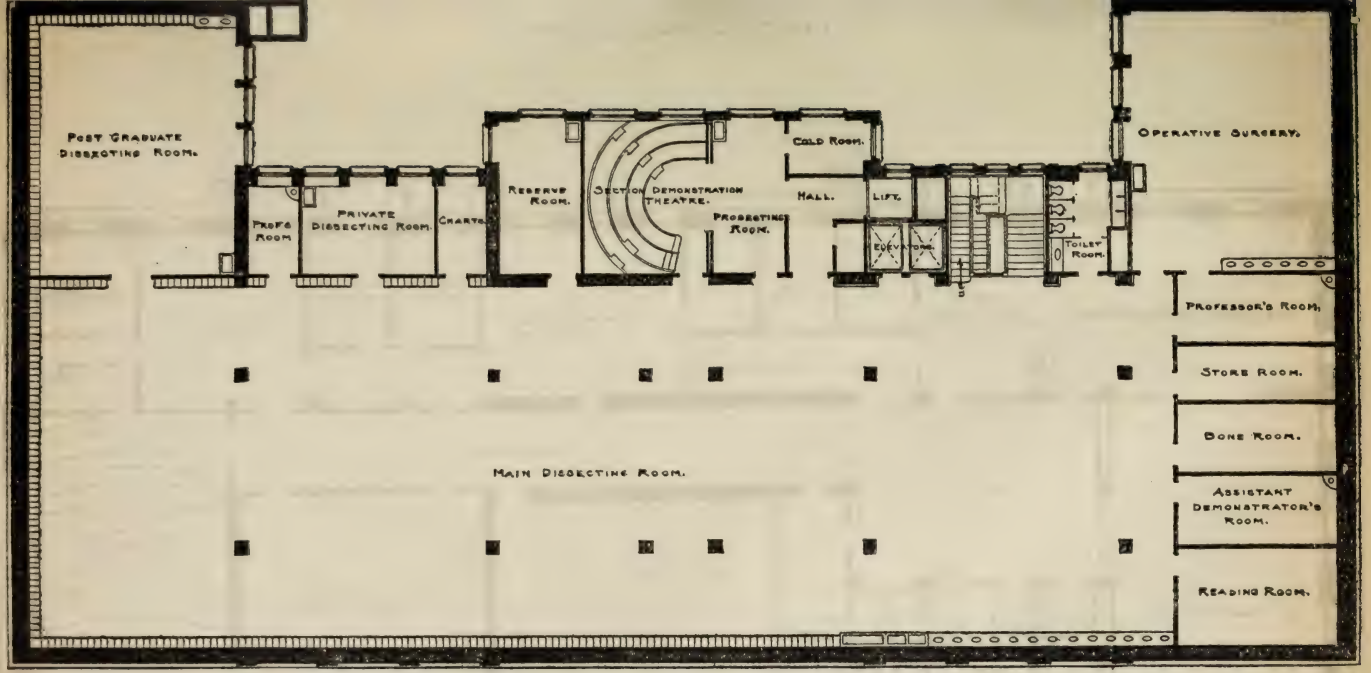
PLAN OF SECOND FLOOR.



PLAN OF THIRD FLOOR.



PLAN OF FOURTH FLOOR.



PLAN OF FIFTH FLOOR.

CORNELL UNIVERSITY

COMPRISES THE FOLLOWING DEPARTMENTS

The GRADUATE DEPARTMENT (Degrees A. M., Ph. D., etc.)

The ACADEMIC DEPARTMENT, or Department of Arts and Sciences (Degree A. B.)

The COLLEGE OF LAW (Degree LL. B.)

The MEDICAL COLLEGE* (Degree M. D.)

The NEW YORK STATE VETERINARY COLLEGE (Degree D. V. M.)

The COLLEGE OF AGRICULTURE (Degree B. S. A.)

The NEW YORK STATE COLLEGE OF FORESTRY (Degree B. S. F.)

The COLLEGE OF ARCHITECTURE (Degree B. Arch.)

The COLLEGE OF CIVIL ENGINEERING (Degree C. E.)

The SIBLEY COLLEGE of Mechanical Engineering and Mechanical Arts (Degree M. E.)

For copies of the University Register and for additional information, apply to

REGISTRAR, CORNELL UNIVERSITY,
Ithaca, N. Y.

* The full four-year course of the Cornell University Medical College is given in the City of New York, but the first half of it—the work of the first and second years—is also given at Ithaca, where it may be taken by men students (undergraduates), and where alone it can be taken by women students (for whom a home is provided in the Sage College for Women). Both men and women students must take the last two years of the course in New York City. Special announcements of the Medical College and information of every kind regarding it will be furnished on application to

SECRETARY, Cornell University Medical College,
First Avenue and 28th Street, New York City.

CORNELL UNIVERSITY
MEDICAL COLLEGE

IN NEW YORK CITY

ANNOUNCEMENT

1901–1902

FOR INSTRUCTION AT ITHACA

SEE PAGE 85

NEW YORK CITY
PUBLISHED BY THE UNIVERSITY



CORNELL UNIVERSITY MEDICAL COLLEGE

CORNELL UNIVERSITY
MEDICAL COLLEGE

IN NEW YORK CITY

ANNOUNCEMENT

1901–1902

NEW YORK CITY
PUBLISHED BY THE UNIVERSITY

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BOARD OF TRUSTEES.

Alonzo B. Cornell	*Ex-Officio*	Ithaca.
The President of the University		Ithaca.
His Excellency the Governor of New York		Albany.
His Honor the Lieutenant-Governor		Albany.
The Speaker of the Assembly		Albany.
The Superintendent of Public Instruction		Albany.
The Commissioner of Agriculture		Albany.
The President of the State Agricultural Soc.		Brooklyn.
The Librarian of the Cornell Library		Ithaca.

*Andrew Carnegie	(*B.*)[1]	Pittsburg, Pa.
*Joseph C. Hendrix	(*B.*)	Brooklyn.
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*Charles Gray Wagner, B.S., M.D.	(*A.*)	Binghamton.
*Horace White, M.A.	(*B.*)	New York.
*George R. Williams, LL.B.	(*B.*)	Ithaca.
Samuel D. Halliday, A.B.	(*B.*)	Ithaca.
Henry Manning Sage, A.B.	(*B.*)	Menands.
Robert H. Treman, B.M.E.	(*B.*)	Ithaca.
George B. Turner, B.S.	(*A.*)	Auburn.
Mynderse Van Cleef, B.S.	(*B.*)	Ithaca.
Frank Sherman Washburn, B.C.E.	(*A.*)	Nashville, Tenn.
Alfred C. Barnes	(*B.*)	Brooklyn.
Franklin C. Cornell	(*B.*)	Ithaca.
Charles S. Francis, B.S.	(*A.*)	Troy.
Jared Treman Newman, Ph.B., LL.B.	(*A.*)	Ithaca.
William H. Sage, A.B.	(*B.*)	Albany.
Roger B. Williams, A.M.	(*B.*)	Ithaca.
Walter Craig Kerr, B.M.E.	(*B.*)	New York.
C. Sidney Shepard, A.B., LL.B.	(*B.*)	New Haven.
Hiram W. Sibley, Ph.D., LL.B.	(*B.*)	Rochester.
Ruth Putnam, B.Lit.	(*A.*)	New York.
Henry Woodward Sackett, A.B.	(*A.*)	New York.
Stewart L. Woodford, LL.D.	(*A.*)	New York.
Robert B. Adam	(*B.*)	Buffalo.
Willard Beahan, B.C.E.	(*A.*)	Evanston, Ill.
Henry Rubens Ickelheimer, B.L.	(*B.*)	New York.
Leland Ossian Howard, M.S.	(*A.*)	Wash., D. C.
Henry B. Lord	(*B.*)	Ithaca.
Andrew D. White, LL.D., L.H.D.	(*B.*)	Ithaca.

Emmons L. Williams, *Secretary*.

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* Term of office (5 years) expires in 1901, the next group of six in 1902, etc., etc.

(1) *B.*, elected by Board; (2) *A.*, elected by Alumni.

MEDICAL COLLEGE COUNCIL.

For the purpose of making recommendations to the Board of Trustees in regard to the business administration of the Medical College, there has been established a Medical College Council, consisting of the President of the University (who is *ex-officio* chairman); the Dean of the Medical Faculty; three Trustees elected by the Board; and two Professors elected by the Faculty. The Council at present is constituted as follows:

JACOB GOULD SCHURMAN, President of the University and Chairman *ex-officio* of the Council.

WILLIAM M. POLK, Dean of the Medical Faculty.

HORACE WHITE,
A. C. BARNES,
H. R. ICKELHEIMER,
} of the Board of Trustees.

L. A. STIMSON,
R. A. WITTHAUS,
} of the Faculty.

J. THORN WILSON, *Secretary*.

CALENDAR

1901-1902

October 1, Tuesday—College opens.

November 5, Tuesday—Election Day. Legal holiday.

November 28, Thursday, to 9 A.M., December 2, Monday—Thanksgiving recess.

December 21, Saturday, to 9 A.M., Thursday, January 2, 1902—Christmas recess.

1902

February 22, Saturday—Washington's Birthday. Legal holiday.

March 28, Good Friday.

May 5, Monday—Examinations for undergraduates begin.

May 19, Monday—Final examinations for graduation begin.

June 4, Wednesday—Commencement.

For Calendar of Instruction in Ithaca, see page 85.

FACULTY OF MEDICINE.

JACOB GOULD SCHURMAN, A.M., D.Sc., LL.D.,
President. *Ithaca, N. Y.*

WILLIAM M. POLK, M.D., LL.D.,
Dean and Professor of Gynæcology and Obstetrics, Gynæcologist to Bellevue Hospital and Obstetrician to Emergency Lying-in Hospital.

LEWIS A. STIMSON, M.D., LL.D.,
Professor of Surgery, Consulting Surgeon to Bellevue Hospital and Surgeon to New York and Hudson Street Hospitals.

RUDOLPH A. WITTHAUS, M.D.,
Professor of Chemistry, Physics and Toxicology.

W. GILMAN THOMPSON, M.D.,
Professor of Medicine, Physician to the Presbyterian and Bellevue Hospitals.

GEORGE WOOLSEY, M.D.,
Professor of Anatomy and Clinical Surgery, Surgeon to Bellevue Hospital, Associate Surgeon to the Presbyterian Hospital.

HENRY P. LOOMIS, M.D.,
Professor of Materia Medica, Therapeutics and Clinical Medicine, Physician to the New York and Bellevue Hospitals.

J. CLIFTON EDGAR, M.D.,
Professor of Obstetrics and Clinical Midwifery, Attending Surgeon to Maternity Hospital.

AUSTIN FLINT, M.D., LL.D.,
Professor of Physiology, Consulting Physician to Bellevue Hospital, President of the Consulting Medical Board of the Manhattan State Hospital for the Insane.

FREDERIC S. DENNIS, M.D., F.R.C.S.,
Professor of Clinical Surgery, Surgeon to Bellevue and St. Vincent's Hospitals.

FREDERIC W. GWYER, M.D.,
Professor of Operative and Clinical Surgery, Surgeon to Bellevue Hospital.

IRVING S. HAYNES, M.D.,
Professor of Practical Anatomy, Surgeon to the Harlem Hospital.

JAMES EWING, M.D.,
Professor of Pathology.

CLINICAL PROFESSORS.

JOSEPH E. WINTERS, M.D.,

Professor of Diseases of Children, Physician to Willard Parker Hospital.

CHARLES STEDMAN BULL, M.D.,

Professor of Ophthalmology, Surgeon to New York Eye and Ear Infirmary, Consulting Ophthalmic Surgeon to St. Luke's and Presbyterian Hospitals and St. Mary's Hospital for Children.

NEWTON M. SHAFFER, M.D.,

Professor of Orthopædic Surgery, Surgeon-in-Chief of the New York State Hospital for the Care of Crippled and Deformed Children, Consulting Orthopædic Surgeon to St. Luke's and the Presbyterian Hospital, Consulting Surgeon to the New York Infirmary for Women and Children.

GORHAM BACON, M.D.,

Professor of Otology, Aural Surgeon to New York Eye and Ear Infirmary.

CHARLES L. DANA, M.D.,

Professor of Diseases of the Nervous System, Physician to Bellevue Hospital, Neurologist to the Montefiore Hospital.

SAMUEL ALEXANDER, M.D.,

Professor of Diseases of the Genito-Urinary System, Surgeon to Bellevue Hospital.

GEORGE THOMSON ELLIOT, M.D.,

Professor of Dermatology, Assistant Physician and Pathologist to the Skin and Cancer Hospital, Consulting Dermatologist to St. Luke's, Columbus, and New York Lying-in Hospitals.

ALLAN MCLANE HAMILTON, M.D., F.R.S.E.,

Professor of Mental Diseases, Consulting Physician, Manhattan State Hospital for the Insane.

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GEORGE P. SHEARS, M.D.,
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GEORGE H. BELL, M.D.,
Assistant Attending Surgeon.

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J. THORN WILLSON,
Clerk of the College.

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Abram T. Kerr, M.D.,
Secretary of the Faculty at Ithaca.

GENERAL STATEMENT.

The Medical Department of Cornell University was established in 1898. This undertaking, which had been contemplated by the Trustees for several years, was made possible by the gift to the University of a commodious and fully equipped building designed for medical instruction, and by the bestowal of a sufficient "Endowment Fund" for the generous maintenance of a large and vigorous school for higher education in medicine.

The Main College Building comprises a Medical School and Dispensary, with principal entrance on First Avenue, opposite Bellevue Hospital, and occupies the entire block between Twenty-seventh and Twenty-eighth Streets on First Avenue, extending back 100 feet, thus affording an available space of nearly 20,000 feet on each floor. The building is designed in a severe style of Renaissance architecture, and is constructed of Indiana limestone and red brick.

The Loomis Laboratory (founded 1886) serves the purpose of undergraduate instruction, in connection with the laboratories in the College building, in such subjects as can best be taught in a laboratory, and it is also especially available to graduates in medicine who may desire to pursue further study or original research in the various departments of laboratory investigation.

The building is five stories in height, fire-proof, with concrete floors, thoroughly ventilated, and provided with an elevator, steam heat, gas, and an electric-light plant. It is lighted by windows on either side.

The Metropolitan Street Railroad cars on Twenty-eighth and Twenty-ninth Streets and First Avenue connect with all the other lines of the company, by a system of transfers at Fourteenth, Twenty-third, Thirty-fourth, and Fifty-ninth Streets, and so put all the hospitals in the city within easy access of the College. Also a convenient station of the Manhattan Elevated Railroad is at Twenty-eighth Street and Third Avenue.

Clinical Facilities.—The Medical Department of Cornell University has been established in New York in order to secure those advantages for clinical instruction which are to be found only in large cities.

The College Dispensary.—In the portion of the College Building allotted to the Dispensary most ample provision has been made for the accommodation of the various clinical departments, of which there are eleven, viz.: General Surgery, General Medicine, including the diseases of the Heart and Lungs, Gynæcology and Obstetrics, Diseases of Children, of the Nervous System, of the Genito-Urinary System, of the Skin, Eye, Ear, Nose and Throat, and Orthopædic Surgery.

Each Department has been furnished with all the instruments and apparatus necessary for the examination and treatment of patients, and a number of small amphitheatres are placed in the Dispensary so that the clinical instruction provided by the curriculum can be carried on without interfering with their treatment.

Members of the Faculty of Cornell Medical College hold appointments in the hospitals and dispensaries of the city, and are enabled to utilize for teaching purposes the large quantity and variety of clinical material of ten of the great City Hospitals, viz.:

Bellevue Hospital—Twenty-sixth Street and East River.

This hospital has 900 beds, and receives 24,000 patients annually. In this building is an amphitheatre capable of seating 300 students, and also a number of small, newly built operating theatres, where section demonstrations in surgery and gynæcology are made before the class. Connected with the hospital is a hydropathic establishment

where students are shown the practical applications of baths, douches, massage, etc.

The following clinics are held during the session :

Obstetrics and Gynæcology — Monday, 2 P.M.
Professor POLK.

Medicine — Tuesday and Friday, 3 P.M.
Professors LOOMIS and THOMPSON.

Surgery — Wednesday and Thursday, 3 P.M.
Professors STIMSON, WOOLSEY, DENNIS, and GWYER.

Genito-Urinary — Wednesday, 3 P.M., for half the term.
Professor ALEXANDER.

Nervous Diseases — Friday, 4 P.M.
Professor DANA.

The Out-Patient Department of Bellevue Hospital treats over 50,000 patients annually. A large proportion of this clinical material is utilized for the purpose of section teaching by members of the Faculty who hold positions in the Dispensary.

City Hospital (formerly Charity Hospital) — Blackwell's Island, East River. To reach this institution the steamer should be taken at the foot of East Twenty-sixth Street.

This hospital has a capacity of 1,000 beds. It offers special advantages for the study of venereal and genito-urinary diseases.

New York Hospital — Fifteenth Street, between Fifth and Sixth Avenues.

This is one of the most thoroughly equipped hospitals in the city, and has connected with it a large Out-Patient Department.

Clinical instruction is given by Professors Stimson, Loomis, Murray, Bolton, and Johnson.

Presbyterian Hospital—Madison Avenue and Seventieth Street.

This is a large general hospital of 350 beds, and includes extensive and varied medical and surgical service. Clinical instruction is given by Professors Thompson and Woolsey.

Willard Parker and Reception Hospitals—Foot of East Sixteenth Street.

These hospitals are in charge of the Board of Health, New York City, and offer unrivalled opportunities for the study of contagious diseases—such as diphtheria, scarlet fever, measles, smallpox, and typhus fever. They contain 200 beds.

Professor Winters gives bedside instruction to small sections of the fourth-year class in the former hospital.

New York Skin and Cancer Hospital — Nineteenth Street and Second Avenue.

This hospital affords accommodation for the treatment of a large number of patients afflicted with cancer and skin diseases. Section instruction in dermatology is conducted here by Professor Elliot and assistants.

St. Francis' Hospital — 609 Fifth Street.

A general hospital with a capacity of 230 beds. Section instruction here is under the charge of Professor Kammerer.

St. Vincent's Hospital — 195 West Eleventh Street.

This is a general hospital containing nearly 200 beds.

Section teaching and clinics are given here by Professor Dennis and Dr. Aspell.

New York Eye and Ear Infirmary — Second Avenue, corner Thirteenth Street.

This hospital is devoted to the treatment of eye, ear, and throat diseases.

Clinical instruction is given in this institution by Professors Bull and Bacon, aided by corps of assistants.

Manhattan Eye and Ear Hospital — 103 Park Avenue.

This is one of the largest institutions for the treatment of this class of diseases in the city. Professor Knight and his assistants give instruction in laryngology.

In addition to these hospitals, the teaching corps of the Medical Faculty is represented upon the visiting staffs of many other hospitals and dispensaries in the city, where Cornell students are invited to attend clinics. Among these are : The Maternity Hospital,



THE LOOMIS LABORATORY

Gouverneur Hospital, Harlem Hospital, Almshouse and Workhouse Hospital, Emergency Hospital, Randall's Island Hospital, Columbus Hospital, German Hospital.

REQUIREMENTS FOR ADMISSION.

The Medical Department of Cornell University is open to all who have a "medical-student certificate." The laws of New York State require of the prospective student of medicine a preliminary education equivalent to that obtainable in a four years' course in any of the public high schools recognized by the Regents as maintaining a satisfactory standard. Those who cannot present formal evidence of at least this amount of preliminary education must pass the examinations conducted by the State authorities at regular intervals throughout the year. The medical-student certificate thus earned by examination or by a high school, college, or university diploma must be filed with the secretary at the time of registration.

As the certificate can be earned with little or no knowledge of subjects which are essential preliminaries to the study of medicine, and which therefore it has been necessary to teach during the first year of the medical course, the Faculty has decided that, after the Session of 1901–02, the following named subjects, taken from the list given in the Regents' "Handbook No. 3, High School Department, Examinations," shall be included in the list of those needed to make up the 48 counts required by law.

The numerical credit allowed for each subject in the "Handbook" is as follows:

Physics	*4 counts*	*Algebra*	*4 counts*
Chemistry	*4 "*	*Plane Geometry*	*4 "*
Advanced Arithmetic	*2 "*	*Third-Year English*	*12 "*

Elementary United States History and Civics . . . . 2 "

Second-Year Latin, or Cæsar's Commentaries, first four books . . . . . 8 "

The total number of counts allowed by the Regents for successful examinations in these subjects is 40. The remaining 8 counts must be made up from any of the following named subject groups enumerated in the Regents' "Handbook": Science; Mathematics; Language and Literature; History and Social Science. The Faculty, however, recommend Second-Year French or Second-Year German, each of which has a value of 8 counts.

Candidates for admission to this College must therefore present, not only the Regents' Medical-Student Certificate, but the "pass cards," or the special "Cornell Medical-Student Certificate," granted by the Regents on application, to show that the certificate has been earned by examination on the subjects specified above.

Attention is called to the fact that the usual certificate of 48 counts obtained from promiscuous subjects will not be accepted.

The subject-matter covered in these requirements, which must be included in the Regents' certificate, is briefly summarized as follows:

Physics (4 counts) includes a knowledge of matter and force, dynamics of fluids, heat, electricity and magnetism, sound and light.

Chemistry (4 counts). Presentation of the practical laboratory note-book, in connection with the examination, may be required at the Regents' examination, which examination includes chemical nomenclature, the chemistry of air, oxygen, hydrogen, nitrogen and its compounds, the halogens, important metals and their compounds, phosphorus, and arsenic.

Advanced arithmetic (2 counts) includes standards of measurements, ratio and proportion, decimals, square and cube root, the metric system, arithmetical and geometrical progression.

Algebra (4 counts) includes quadratic equations.

Plane geometry (4 counts) includes the demonstration of simple original theorems.

Latin (that described in the "Handbook" as either Second-Year Latin or Cæsar's Commentaries is an 8-count subject) includes a knowledge of grammar and the ability to translate at sight simple

passages from any standard author or from the first four books of Cæsar's Commentaries.

English (that described in the "Handbook" as Third-Year English is a 12-count subject) includes a knowledge of grammar and composition, and a reasonable familiarity with the masterpieces of English or American literature.

Elementary United States History and Civics (2 counts) includes important historical dates, the character and purpose of the different wars, the purport of the Constitution, and the relations of the Federal and State governments.

The Second-Year French or German recommended by this Faculty (each 8-count subjects) includes a knowledge of grammar and ability to translate at sight simple passages from any standard author.

Applicants for admission who can present evidence of having successfully completed at least one full year's course of study in the collegiate department of any college or university registered by the Regents as maintaining a satisfactory standard, are assumed to have had a preliminary education approximately equivalent to that described above, and may obtain a Medical-Student Certificate on application to the Regents at Albany, and will not be required to pass any examination, provided they appear before the Professor of Chemistry and Physics and submit satisfactory evidence that they possess the necessary qualifications in these subjects.

As the new requirements for matriculation will considerably increase the extent of preliminary education represented by the degree of M.D., it is recommended that, before they become obligatory, these examinations be taken by prospective students; and a special certificate of matriculation will be issued to successful candidates.

As a College of Arts and Sciences offers great advantages to prospective students of medicine, all who can do so are urged to take the Freshman and Sophomore years in the Academic Department at Ithaca. After the completion of these years the student may elect the work of the first two years of the medical department, which may

be pursued at Ithaca, and at their expiration finish the remaining two years of the medical course in New York, and thus obtain both the B.A. and M.D. degrees in six years. This is possible because the first two years of the medical course in New York is offered in duplicate at the University in Ithaca. Women must take these years in the medical department in Ithaca, where special accommodations are provided for them in the Sage College. Women are received at the medical department in New York City in the third and fourth years only.

REGENTS' ENTRANCE EXAMINATIONS AND CERTIFICATES.

The following requirements for admission to candidacy for a degree in *any medical college in New York State* were established by laws passed by the Legislature, to take effect March 21, 1896.

Medical-Student Certificate.

Each student who matriculates with the intention of becoming a candidate for the degree of doctor in medicine, whether he comes to New York to begin or continue the study of medicine, must file with the Dean of the College a medical-student certificate issued by the Regents of the University of the State of New York.

This certificate is granted according to the following extract of the Laws of 1896, ch. iii.:

To provide for the preliminary education of medical students.

The degree of bachelor or doctor of medicine shall not be conferred in this State before the candidate has filed with the institution conferring it the certificate of the Regents that before beginning the first annual medical course counted toward the degree (unless matriculated conditionally as hereinafter specified) he had either graduated from a registered college or satisfactorily completed a full course in a registered academy or high school; or had a preliminary education considered and accepted by the Regents as fully equivalent; or

held a Regents' medical-student certificate, granted before this act took effect; or had passed Regents' examinations as hereinafter provided. A medical school may matriculate conditionally a student deficient in not more than one year's academic work or twelve counts of the preliminary education requirements, provided the name and deficiency of each student so matriculated be filed at the Regents' office within three months after matriculation, and that the deficiency be made up before the student begins the second annual medical course counted toward the degree. Students who had matriculated in a New York medical school before June 5, 1890, and students who had matriculated in a New York medical school before May 13, 1895, as having entered before June 5, 1890, on the prescribed three years' study of medicine, shall be exempt from this preliminary-education requirement.

A medical-student certificate may be earned without notice to the Regents of the conditional matriculation either before the student begins the second annual medical course counted toward the degree or two years before the date of the degree for matriculants in any registered medical school, in the four cases following:

1. For matriculants prior to May 9, 1893, for any twenty counts, allowing ten for the preliminaries, not including reading and writing.

2. For matriculants prior to May 13, 1895, for arithmetic, elementary English, geography, spelling, United States history, English composition and physics, or any fifty counts, allowing fourteen for the preliminaries.

3. For matriculants prior to January 1, 1896, for any twelve academic counts.

4. For matriculants prior to January 1, 1897, for any twenty-four academic counts.

But all matriculants, after January 1, 1897, must secure forty-eight academic counts, or their full equivalent, before beginning the first annual medical course counted toward the degree, unless admitted conditionally, as hereinbefore specified, when the deficiency must be made up before the student begins the second annual medical course counted toward the degree.

This act shall take effect March 21, 1896, except that the increase in the required course of medical study from three to four years shall take effect January 1, 1898, and shall not apply to students who matriculated before that date and who receive the degree of doctor of medicine before January 1, 1902.

Notes on the Law.

1. For matriculants prior to January 1, 1897, medical schools are not required to furnish notice of conditional matriculation, and such students may make up

the full requirement at any time before beginning the second annual course counted toward the degree, or two years before the date of the degree.

All matriculants after January 1, 1897, must secure forty-eight academic counts or their full equivalent before beginning the first annual course counted toward the degree, unless admitted conditionally, in which case the deficiency is not to exceed twelve academic counts and must be made up before the student begins the second annual course counted toward the degree.

2. The Regents will accept as fully equivalent to the required academic course any one of the following:

(*a*) A certificate of having successfully completed at least one full year's course of study in the collegiate department of any college or university registered by the Regents as maintaining a satisfactory standard.

Certificates should be issued in due form by the president, dean or principal of the institution, and should be signed under seal or acknowledged before a notary, unless the institution is in the University of the State of New York or the signature of the officer issuing is well known in the Regents' office.

(*b*) A certificate of having passed in a registered institution examinations equivalent to the full collegiate course of the freshman year or to a completed academic course.

Three full academic years of satisfactory work may be accepted as a high-school course till August 1, 1896, when four full academic years will be required.

(*c*) Regents' pass-cards for any forty-eight academic counts or any Regents' diploma.

(*d*) A certificate of graduation from any registered gymnasium in Germany, Austria, or Russia.

(*e*) A certificate of successful completion of a course of five years in a registered Italian *ginnasio* and three years in a *liceo*.

(*f*) The bachelor's degree in arts or science, or substantial equivalents from any registered institution in France or Spain.

(*g*) Any credential from a registered institution or from the government in any foreign state or country which represents the completion of a course of study equivalent to graduation from a registered New York high school or academy, or from a registered Prussian gymnasium.

3. March 22, 1898, the Regents approved the following modifications in requirements for medical-student certificates:

(*a*) **Partial Equivalents.**—Evidence of completion in a registered school of one or more years of satisfactory high-school work, and Regents' examinations in subjects representing the balance of the required four-year course (any 12, 24, or 36 additional counts).

(*b*) **Cumulative Credit.**—Regents' examinations in the second or third year of any language course will be accepted as including the preceding years in those courses.

(*c*) **Date of Certificate.**—Candidates unable to offer certificates of the required academic work in a registered institution may present evidence to the Regents that they had the required preliminary education before beginning the second course counted toward the degree, and may, on passing Regents' examinations, receive their certificates as of the date when the preliminary work was completed.

4. Other equivalent credentials from other States and countries besides those specified in the law, which may be accepted by the Regents in place of an examination, may be ascertained by written application to Examination Department, University of the State of New York, Albany, N. Y.

5. Any student who has matriculated under the legal requirements in regard to Regents' examinations, existing at the time of matriculation, will not require another certificate whenever he may be graduated.

6. If students unable to offer equivalents come from out of the State, they may enter the second course counted toward the degree, provided that at the preceding June or September examination they meet the preliminary requirement, and further provided, that the medical student certificate can be dated back under (*c*) above.

Medical-student certificates issued on "equivalents" without examination, may be obtained at any time before the degree of M.D. is conferred, provided that the course of study for which the certificate is issued was completed within the prescribed time.

Examinations under the Act.

Students who do not obtain a medical-student certificate without examination must pass an examination on the subjects required by the Regents. These examinations are held entirely under the charge of the Regents in New York, and in many other places throughout the State, on the following dates:

CALENDAR OF REGENTS' EXAMINATIONS.

YEAR.	JAN.	MARCH.	JUNE.	SEPT.
1901	21–25	27–29	17–21	24–26
1902	27–31	24–26	16–20	23–25

NOTE.—September examinations will be held in New York, Albany, Syracuse, and Buffalo, for law and medical students only. The other examinations are held in New York and in numerous academies and high schools throughout the State for professional and academic students.

Extracts from Regents' Rules.

Order of Studies.—There is no restriction in the order in which studies may be taken. Advanced students who may come from other States, or who, for other reasons, have not passed in elementary subjects, may take them at any time: *e. g.*, arithmetic after algebra or geometry; English composition after rhetoric, etc.

Time Limit.—There is no limit of time, but all credentials issued by the university are good until cancelled for cause. Studies necessary to obtain any credential may be passed at different examinations.

Seventy-five per cent. of correct answers is required in all subjects.

Answer papers will be reviewed in the Regents' office, and all papers below standard will be returned to the candidates. For those accepted, pass-cards will be issued.

Pass-Cards.—A Regents' pass-card is not limited in time; therefore it is not necessary to pass any Regents' examination a second time.

Medical-Student Certificate.—When all requirements are fulfilled, the Regents grant a medical-student certificate.

On receiving this certificate, the candidate must send it to the secretary or recording officer of the university or college at which he intends to study medicine.

N. B.—*Candidates for medical students' examination should send notice at least ten days in advance, stating at what time and in what studies they wish to be examined*, that required desk-room may be provided at the most convenient place.

Candidates who fail to send this advance notice will be admitted only so far as there are unoccupied seats.

Medical-Student Certificates Without Examinations.

Students who may be entitled to the medical-student certificates on equivalents (see notes on the law, 2, 3, 4, 5, and 6) are advised to present or forward their credentials to the Secretary of the College, who will send them to the Regents for examination and approval. They will be returned as soon as verified, and, if accepted, the proper certificate will be sent with them. The Secretary of the College will furnish, on application, blank forms of collegiate, academic, or high-school certificates.

Other equivalent credentials from foreign countries or from other States may be accepted by the Regents at their discretion.

The secretary will furnish full information on request.

Directions for Obtaining a Regents' Medical-Student Certificate.

1. Give the full name of the applicant, the exact name of the institution and of the department attended, an accurate description of the course pursued, using the same terms that are given in the official announcement, circular, or catalogue of the institution.

Send an official announcement, circular, or catalogue of the institution, showing:

(*a*) Requirements for admission; *i.e.*, subjects and years given to their completion.

(*b*) Requirements for graduation in each course, including subjects pursued and time devoted to each.

JAMES RUSSELL PARSONS, JR.,
Director of College Dept.

Regents' Office, Albany, N. Y.,
15 April, 1898.

REGISTRATION AND MATRICULATION.

Students on entering the College must register and pay the registration fee of $5. The payment of this fee is required only once. They will receive a receipt which will be exchanged for a certificate of full or conditional matriculation when they shall have complied with the Regents' requirements for such matriculation; but students who have already been matriculated at a medical college in the State of New York, according to the Regents' requirements, and those who already hold a medical-student certificate, will be matriculated immediately on registration.

THE ADMISSION OF STUDENTS FROM OTHER ACCREDITED MEDICAL COLLEGES.

Admission to Advanced Standing.

Graduates of Cornell, Yale, Harvard, Princeton, University of Pennsylvania, Johns Hopkins, Columbia, University of Michigan, and other accredited universities, who have taken either a preparatory medical course or special work in organic or inorganic chemistry,

physics, or physiology, will be allowed credit for the work which they have done, and may be excused from the recitations upon these subjects, and from the exercises of the chemical laboratory in the first year, provided they pass examinations before the professors of these departments, and provided they give to dissection and electives as described on pages 37–38, in the various departments, a full equivalent in hours to the subject they may have passed by examination.

Students who have had training in microscopical technique or in histology will be given advanced work in the histological laboratory.

Students who have already attended the requisite number of courses in other accredited medical colleges may be admitted to advanced standing in any one of the years of the four years' course of the Cornell University Medical College by presenting a Regents' medical-student certificate and by passing examinations in the subjects described on pages 75–78 as completed, in the year or years previous to that which the student desires to enter. The applicant must also present certificates of having satisfactorily completed laboratory courses equivalent to those required of the Cornell medical students in the year or years previous to that to be entered.

According to the law of the Regents of the State of New York, no student from an unregistered Medical School may obtain a degree on less than two years of medical study in this State.

Holders of Special Degrees.

Graduates of pharmacy or of dental or veterinary or other professional schools, who can present satisfactory evidence of having completed any course of study required in any year by this College, may upon passing a satisfactory examination be excused from attendance upon instruction in that subject, provided they take equivalent additional work in other branches.

Admission to Special Courses.

Graduates in medicine, or students who desire to pursue a special course without graduation, are admitted to registration as special

students after approval by the head of the department conducting the course, without Regents' or other preliminary examination. Such special courses do not count in any way as part of the four years' course required of candidates for the degree of doctor in medicine. Further information regarding such courses, fees, etc., may be obtained by addressing the Secretary of the Cornell University Medical College, First Avenue, 27th to 28th Streets, New York.

NEW YORK STATE SCHOLARSHIPS.

Under the law of the State the Superintendent of Public Instruction is empowered to award annually a number of free scholarships in Cornell University equal to the number of Assembly Districts in the State. These scholarships entitle the holder to free tuition for four years in any department of Cornell University. They are awarded on examination to candidates from the general Assembly Districts "in consideration of their superior ability and as a reward for superior scholarship in the academies and public schools of this State."

For particulars in regard to these scholarships, application should be made to the Superintendent of Public Instruction at Albany.

Holders of State scholarships are notified that failure to register before the close of registration day involves the severance of their connection with the University and consequently the forfeiture of their scholarships. The President of the University is required by law to send immediate notice of such vacancies to the Superintendent of Public Instruction and the Superintendent fills vacancies forthwith.

UNIVERSITY UNDERGRADUATE SCHOLARSHIPS.

Pursuant to the action of the Trustees, at a special examination held at Ithaca, September 24 to 27, 1901, at the beginning of the freshman year, eighteen scholarships of the annual value of $200 each will be annually thrown open to competition for all members of

the freshman class who are registered in courses leading to first degree.

Students of high ability from the State of New York will have the additional advantage of being able to secure State scholarships, as there is nothing in the University statutes to prevent a student from holding both a State scholarship and a University scholarship.

These scholarships will be given to those who on examination shall average the highest in any three of the following groups, always including group (*a*). Previous to entering this competitive examination, however, candidates are required to pass satisfactorily the regular entrance examination in English at the University. *School certificates, Regents' diplomas, and normal school diplomas* are not accepted in place of this English examination.

(*a*) Plane geometry and algebra through quadratic equations.

(*b*) Solid geometry, advanced algebra, plane and spherical trigonometry. (*c*) Greek. (*d*) Latin. (*e*) French. (*f*) German.

For further information in regard to the scholarships see the Register of Cornell University.

CHARGES FOR INSTRUCTION.

First Year.		
Registration[1]	$5 00	
Tuition	$150 00	
Laboratory fees	$35 00	
		$190 00
Second Year.		
Tuition	$150 00	
Laboratory fees	$30 00	
		$180 00
Third Year.		
Tuition	$150 00	
Laboratory fees	$30 00	
		$180 00

[1] The registration fee is payable only once, on entrance.

Fourth Year.

Tuition	$150 00	
Laboratory fees	$25 00	
Graduation fees[1]	$25 00	
		$200 00

Tickets must be taken out and paid for at the beginning of the session.

Each student in the first three years is required to pay to the Clerk of the College ten ($10) dollars each year to cover breakage in the laboratories. This sum, less the amount charged against it for breakage, will be returned to him at the end of each year.

SPECIAL STUDENTS.

Special students may, on the recommendation of the head of the department concerned, be admitted to any of the courses of instruction offered in the college, on the payment of a registration fee of five dollars and a tuition fee of twenty-five dollars, except in dissection, when the tuition fee is fifteen dollars.

GENERAL STATEMENT OF THE PLAN OF INSTRUCTION.

The chief features in the scheme of instruction are thorough laboratory training in all the subsidiary branches, daily recitations from standard text-books, clinical teaching in dispensaries and at the bedside in hospitals, and enough didactic lectures to make clear the

[1] The graduation fee is payable on registering for graduation. The tuition fees for the first two years at Ithaca are identical with those of the same period in New York. All fees are payable at the beginning of the term, but in special cases they may be paid semi-annually in advance. No rebate will be made in any case.

No remission of laboratory fees will be made because of previous instruction elsewhere in the subjects.

general principles and conflicting theories in the practice of medicine and surgery. All students in any one class advance simultaneously in the various subjects, and no section or group works apart from any other, thereby losing the opportunity to appreciate the relationship of the different matters which at any given time may be under discussion. Allowance, however, has been made for those who through natural endowments or superior energy or previous education can outstrip their less fortunate fellows. A careful record is kept of the attendance and character of the work of every student, and by this means at the end of the year each is placed in the section to which this record entitles him. A system of electives in clinical, laboratory, and recitation work is also provided, which it is the aim of the Faculty to enlarge as opportunities arise. A student is required to master all the subjects taught in any given year before being allowed to advance to the next, as the knowledge acquired in each year is necessary for a proper understanding of that which follows. Examinations are held at the end of each session; a failure to pass not more than two subjects, one of which at least must be a laboratory subject, is allowed in the spring, but every subject must be satisfactorily passed at the beginning of the next ensuing college year, or the applicant will be compelled to repeat the work of the preceding year. The following is a statement of the curriculum in each of the four annual sessions necessary to obtain the degree of M.D., and attention is called to the careful arrangement of the instruction in time and correlation in subject matter so as to provide for a proper understanding and assimilation of the knowledge imparted in the different departments.

The essential feature of the entire system is the division of the classes of the several years into small sections for recitations, demonstrations, laboratory exercises, and for clinical instruction in the college dispensary, and in the wards of the numerous hospitals attended by the members of the faculty.

If a student, without neglecting his required schedule work, desires to take advanced work and can make an opportunity to do this,

without interfering with the work of other students, he shall be permitted to do so and shall receive credit for it.

The first year is devoted to anatomy—several consecutive uninterrupted hours being provided for dissection—embryology, normal histology, chemistry, and physics. The gross anatomy of the thoracic, abdominal, and pelvic viscera is demonstrated in outline in the early weeks of the session in anticipation of the examination of these organs in the histological laboratory. At the same time the department of Physiology presents for consideration the cell, the blood, the circulation, respiration, digestion, absorption, secretion and excretion, in the order named. Thus the study of gross and histological anatomy and physiology advance together and in correlation with each other.

The general principles of mechanics, hydrostatics, optics, electricity, heat, and acoustics, and their application to medicine, are taught in lectures illustrated by experiments. Inorganic chemistry is studied in the laboratory throughout the year. The class is divided into small sections, each of which must attend daily one or more recitation exercises in anatomy, histology, physiology, and chemistry. These follow as closely as possible the practical work.

Students who have had the advantage of a thorough preliminary education in Physics and Chemistry before entering the medical school, after satisfactorily demonstrating to the professor in charge of this department, by examination or otherwise, that they are familiar with the work of the first year, may be excused from attendance upon physics and chemistry. In place of these subjects they must elect at least one of the following courses given in the second year—namely, laboratory pharmacology, or physiological chemistry, or bacteriology.

During the second year anatomy, physiology, and chemistry are completed, except as they are reviewed in recitations during the fourth year preparatory for the State examinations, and the study in text-books of medicine, surgery, obstetrics, and pathology is begun. The gross anatomy of the organs of special sense, and then that of

the nervous system, are taught at the outset of the year by demonstrations to small groups of students. The demonstration of these organs is followed as closely as possible by the study of them in the histological laboratory during the first half of the session. The lectures and recitations in physiology follow the same course, and, being antedated by the study of the gross and histological aspects of the parts under discussion, are capable of easy comprehension. Organic and physiological chemistry is studied in the laboratory and by lectures and recitations throughout the year. At the same time a laboratory course in pharmacology is pursued, familiarizing the student with the physical and chemical properties of drugs. Bacteriology is begun, the student commencing with the preparation and care of media and the recognition of the gross and microscopical characteristics of micro-organisms.

During the first few weeks of the term lectures are delivered upon the general principles of pathology, with particular reference to the elucidation and classification of the various forms of inflammation. The substance of these lectures will form the basis of the subsequent instruction in this subject in all departments, and thus insure uniformity in the teaching and understanding of the causes of disease. These lectures are supplemented by autopsies before small sections to demonstrate gross lesions. Several weeks are given to practical instruction in normal physical signs as applied to the chest. Having obtained some knowledge of pathology, the student by means of recitations is made familiar with the principles of surgery, medicine, and obstetrics.

Students who have completed elsewhere courses in physiological chemistry or pharmacology equivalent to those of the second year, may by passing examinations at the beginning of the term be excused from further attendance upon them.

Students thus excused from part of the second-year work and those who have been allowed electives in their first year may take one or more of the following elective courses during their second year—namely: 1. Bacteriology in its practical relation to disease. 2. Materia

medica recitations of the third year. 3. Manikin course in obstetrics. 4. Obstetrical clinic. The two latter elective courses are in preparation for the required work in practical obstetrics, which, usually taken in the third, can thus be taken during the second summer if desired.

In the third year medicine, surgery, materia medica, therapeutics, and obstetrics are studied systematically from text-books and practically at the bed-side, in the dispensary, and in general clinics. Enough didactic lectures are given by the Professors of Medicine and Surgery at the beginning of the session to explain general principles in symptomatology and diagnosis. Throughout the year the class must attend in small sections one or more daily recitations from standard text-books upon subjects previously assigned and learned. Pathology is studied in greater detail than previously, both in the laboratory and in the dead-house, and as far as possible morbid processes are demonstrated in advance of the study of the disease in the text-book or its clinical presentation.

In conjunction with the bed-side teaching instruction is given in all of the modern laboratory aids in diagnosis classified under the term of clinical pathology.

Groups of ten or twelve students are taught by individual experience the methods of examining patients for the detection of abnormal physical signs, and at the close of the session all students are expected to be familiar with the recognition and treatment of the common diseases and be conversant with the fundamental subjects of a medical education. The specialties taken up in this year are neurology, pediatrics, toxicology, and gynæcology. They are taught by clinical lectures as part of the general subjects of the practice of medicine, surgery, and obstetrics.

To meet the requirements of hospital and other boards of examination, such as those of the civil service or of the army and navy, students who wish to compete in these examinations may elect in third and fourth years to have all their recitation exercises with special instructors appointed by the faculty. A separate fee is required for this service.

The fourth year is devoted chiefly to the study of diagnosis and treatment of disease at the bed-side, in the dispensary, and in clinics. The extent of this may be inferred from the present arrangement of the schedule, which contemplates about fifty hours of hospital-ward work in medicine and nearly the same number in surgery for every student. There are as few lectures as are consistent with the proper exposition of the chief problems confronting the profession, and these are delivered at the outset of the term, in order that the student may become familiar as soon as possible with the facts which are to be taught practically. For example, to the professor of medicine twelve didactic lectures are assigned. This proportion has to be exceeded somewhat in therapeutics, obstetrics, and the specialties, but many of these lectures are illustrated by the presentation of typical cases and are really clinics. The clinical instruction in surgery is supplemented by an operative course in which the student performs upon the cadaver all the common operations. Particular attention is also given to the methods of making medical and surgical diagnoses, and in this connection constant use is made of the bacteriological and chemical laboratories, where the student examines specimens taken at the bed-side during one exercise, and reports the results to the class at the next.

Hygiene and its application in the province of the physician and public health officer is taught by lectures supplemented by demonstrations of the plans and methods of the city health board.

The major part of the theoretical instruction, as in the previous years, is given by recitations in which the subjects of medicine (including neurology), surgery (including orthopædic surgery and genito-urinary diseases), therapeutics, obstetrics, and gynæcology are concluded, and pathology, anatomy, chemistry, and physiology and materia medica are reviewed.

The instruction in the specialties, which is made the distinguishing feature of this final year, is begun with a few clinical lectures and is continued by a course in the examination and treatment of dispensary patients by each student. Every one receives from fourteen

to twenty-one hours of this training (the number varies somewhat with the subject), and should become reasonably proficient in the use of instruments, the ability to make diagnoses and give relief. There is no attempt made to produce experts, but each one before graduation must know enough about the specialized branches of medicine to be a competent general practitioner. The lectures upon the physiology of the organs of special sense delivered in the fall to the second-year class, must also be attended by the seniors. These lectures serve as an introductory review of facts necessary for a proper knowledge of the specialties and obviate unnecessary repetitions by the different professors.

Every student must personally attend a definite number of cases of labor, and for this purpose the maternity service connected with the college offers excellent opportunities. The faculty earnestly recommend that this work be accomplished in the summer preferably of the third year; by the proper choice of electives it is possible in the second summer, but this is not as desirable or profitable. If taken during the regular winter session much loss in other work would result. Those who for any proper reason cannot take this course as advised in the summer might, however, succeed in obtaining the necessary cases during the winter by selecting odd hours when not engaged in section work, and by arrangement with the office to receive telephone calls.

As in the previous year, there are the same electives in recitations for those who wish particularly to fit themselves for hospital and other competitive examinations. There is also offered an advanced course in neurology in a hospital devoted largely to the care of this class of patients. There will in addition be elective practical courses in the dispensary as opportunity arises.

DETAILS OF THE PLAN OF INSTRUCTION.

ANATOMY.

GEORGE WOOLSEY, M.D., *Professor of Anatomy.*
IRVING S. HAYNES, M.D., *Professor of Practical Anatomy.*
DR. WILLIAM F. STONE, *Instructor.*

Assistant Demonstrators of Anatomy,

DR. WILLIAM F. STONE, DR. JOHN A. HARTWELL,
DR. FRANK S. FIELDER, DR. CLARENCE A. MCWILLIAMS.

Anatomy is taught in the first and second years by lectures, recitations, section demonstrations, and dissection. A review quiz to prepare for State and hospital examinations is held during the fourth year. The course in anatomy is arranged to correspond as far as possible with the courses in physiology and histology.

Lectures in the first year are confined to practical applied anatomy of the bones and joints, and follow the recitations on these subjects. In the second year the lectures are devoted to regional, applied and surgical anatomy, the students being already well grounded in descriptive anatomy. The order of subjects is head and neck; thoracic, abdominal, and pelvic cavities and viscera, and perineum.

One lecture a week is given during the second year by the Professor of Practical Anatomy on the development and gross anatomy of the nervous system, the gross anatomy and relations of the extremities and the viscera.

Professor Gage will give six lectures on embryology during the month of March to first-year students.

Descriptive Anatomy is taught by recitations, section demonstrations, and dissection.

Recitations, from standard text-books, are held by the Instructor in Anatomy twice a week for each section of the first-year class and once a week for each section of the second-year class. During the first year bones, joints, muscles, arteries, and veins are

recited upon; during the second year the nervous system and the viscera. Written reviews are held at intervals under the direction of the Professor of Anatomy, the last of which is a general review or examination of the year's work. In the first year the students of each section begin to recite upon the bones of that part which they are to dissect at the end of the first fortnight, and so on for the remaining parts.

PRACTICAL ANATOMY.

Section Demonstrations are conducted by the Professor and Assistant Demonstrators of Practical Anatomy once a week for each section during the first and second years. During the first three months of the first year the students are prepared for their dissection by recitations in the classroom upon the bones, by section demonstrations on the cadaver of the part they are to dissect in the following fortnight, and by these means they are taught how to dissect, what to find, and where to find it. In addition, one preliminary demonstration is given weekly from October to January on the thoracic, abdominal, and pelvic viscera to prepare students for the courses in physiology and histology by demonstrating the organs whose function and structure they are to study. After this the joints are demonstrated. In the second year the brain and nervous system, the organs of sense, the thoracic and abdominal viscera, and the perineum are demonstrated.

Dissection.—The course in dissection is arranged on a laboratory basis—that is, the students are required to dissect during certain specified hours each day while the demonstrators are in attendance. This insures more satisfactory work on the part of the students and better supervision and teaching on the part of the demonstrators. Ten hours a week are assigned in the schedule for this anatomical laboratory course during the first and second year. In addition dissection is permitted at any time after 10 A.M., if the students are at leisure.

Two courses of dissection are required. The first course for first-

year students comprises the dissection of three parts—the head and neck, and upper and lower extremities. This course is begun after the recitations and section demonstrations have prepared each student for the part assigned to him and continued in rotation for the remaining two parts. This course includes the dissection of the joints.

The second course consists of the dissection of four parts, and is designed for second-year students and such first-year students as have completed the first course. This course includes a review of the first course, with more particular attention paid to the minuter parts, and, in addition, the dissection of the brain, the trunk, with the thoracic and abdominal viscera, and the perineum. The first and the greater part of the second course may be finished during the first year. This will afford time in the second year for additional and advanced work after completing the required parts. Students are examined and marked on the dissection of each part required. Prepared bones are loaned to students during the session from a large collection kept for this purpose.

Preliminary training in comparative anatomy is very desirable. A practical, in addition to a written, examination is held by the Professor of Anatomy at the end of the second year. At the end of the first year there is a written review or examination on the work of the year.

Advanced, Special, and Post-Graduate Courses.—Facilities are offered to students and the medical profession for pursuing advanced, special, and post-graduate courses in practical anatomy.

PHYSIOLOGY.

AUSTIN FLINT, M.D., LL.D., *Professor of Physiology.*

Instructor,	*Assistant,*
DR. JOHN A. HARTWELL.	DR. LOUIS NEUMANN.

Instruction in this branch is given by lectures and recitations, during the entire session, to first-year and second-year students.

Lectures.—The lectures by the professor cover the field of medi-

cal physiology within the first two years. The first ten lectures of the second-year course, devoted to the special senses, are given to the second-year class and the fourth-year class together. Fourth-year students are thus enabled to review the special senses as an introduction to the study of ophthalmology and otology. Throughout the entire course on physiology special attention is paid to its applications to practical medicine and surgery, much time being devoted to what may be called applied physiology. Physiological chemistry, anatomy, and histology are taught only to the extent essential to a comprehension of the physiology of the systems and organs of the body. These subjects are completed by practical laboratory work.

Recitations.—First-year students recite twice a week, completing the subject of human physiology, as taught by the professor, except the nervous system and the special senses. Second-year students recite twice a week up to December 21st, and once a week after January 2d, on the special senses and the nervous system. They also briefly review the work of the first year. Review recitations for State Board examinations are held for fourth-year students.

CHEMISTRY, PHYSICS, AND TOXICOLOGY.

RUDOLPH A. WITTHAUS, M.D., *Professor of Chemistry.*

Assistant Professor,

DR. IVIN SICKELS.

Instructors,

DR. LOUIS W. RIGGS, DR. CHARLES G. L. WOLF.

Assistant,

CARROLL D. PARTRIDGE, B.S.

Lectures.—Students of the first year will receive three lectures each week on physics, the divisions of the subject being considered in the following order: General properties of matter and force, mechanics, hydrostatics, pneumatics, optics, electricity, heat, and

acoustics. The lectures will be abundantly illustrated, and the relations of physics to surgery and medicine will be particularly considered.

During the second year, students will attend two lectures weekly. Organic chemistry will be considered in the earlier part of the term to an extent sufficient to impart a knowledge of the principles of combination of the carbon compounds and the properties and relationships of those which are of physiological, toxicological, or therapeutical interest. The lectures during the latter part of the second year will be upon physiological chemistry.

During the third year one lecture will be given weekly on toxicology for twenty weeks. In these lectures the medical and medico-legal bearings of the subjects will be chiefly considered.

Recitation.—Students of the first year will recite twice each week on physics and the principles of chemistry and mineral chemistry. Those of the second year will recite once weekly on organic and physiological chemistry.

Laboratory Work.—Laboratory instruction will be given students of the first year four hours weekly during the entire session. This course will consist of an experimental study of the commoner elements and compounds in illustration of the recitation course, and of training in the processes of qualitative analysis of inorganic substances, and poison, mineral and organic.

Students of the second year will receive laboratory instruction two hours weekly during the term in physiological and clinical chemistry.

Each student is fully supplied with all apparatus and chemicals required, except urinometers, which are carefully corrected for the student that they may serve for future use.

These courses are conducted by the Assistant Professor, and by the instructors under the direction of the Professor of Chemistry and Physics.

First-year students presenting satisfactory evidence of having performed equivalent work in chemistry and physics will be excused from first-year work in this department, and be given advanced laboratory work equivalent in hours to that omitted.

MATERIA MEDICA AND THERAPEUTICS.

HENRY P. LOOMIS, M.D.,
Professor of Materia Medica and Therapeutics.

Instructors,

DR. WARREN COLEMAN, DR. EDMUND P. SHELBY,
DR. WALTER ARTHUR BASTEDO, Ph.G.

Clinical Assistant,
DR. RUSSELL BELLAMY.

Instruction is given in this department during the second, third, and fourth years by means: 1. Lectures. 2. Clinical instruction. 3. Recitations. 4. Laboratory work.

Lectures.—These are given by the professor twice a week to the third-year students and once a week to the fourth-year students. They are confined almost exclusively to therapeutics, as it is believed that materia medica can best be taught by recitations and by laboratory work.

The lectures to the third-year students will consider the therapeutic uses of the most important drugs from the standpoint of the drug itself, such as the methods of prescribing the drug and the conditions for which it is given; only so much of the physiological action of the drug will receive attention as will explain its therapeutic value.

The lectures to the fourth-year students will be confined almost exclusively to a consideration of the systematic treatment of the different diseases. The plan of treatment will be given in detail, with definite instruction as to the drugs to be used and the preparations which are most reliable.

Lectures will be given on remedial agents other than drugs, such as massage, dietetics, climatology, mineral waters, and hydrotherapy.

Clinical Instruction.—A new departure in the teaching of therapeutics will be made by affording the students of the third and

fourth years opportunity to observe the effects of the different remedies on the natural course of diseases. To accomplish this the classes will be divided into small sections and taken by the professor into the wards of Bellevue Hospital. Actual practice is given in the employment and application of the various therapeutic agents used in medicine, such as the aspirator, leeches, cups, cautery, stomach-tube and stupes. The hydropathic establishment connected with this hospital is one of the most complete in the country. Here to small sections will be demonstrated the various applications of water to the treatment of disease—such as baths, packs, douches, etc. A professional masseur will show the technique of massage and the Swedish movements. The treatment of the different diseased conditions observed will be systematically studied, and opportunities will be given to the members of the class to make personal examination of the patient and to watch the modification of disease produced by the remedies prescribed. The clinical work of the third and fourth years affords abundant opportunities for further training in practical therapeutics. A general medical clinic will be held by the professor once a week in the amphitheatre of Bellevue Hospital, at which special attention will be given to the treatment of the diseases under consideration.

Recitations.—Students of the third year will recite to the instructor twice a week from a standard text-book. During the fourth year a recitation will be held once a week on therapeutics.

The recitations will embrace a study of the action of all the more valuable remedial agents in connection with the description of the drugs themselves.

Each student will be thoroughly drilled in prescription-writing and in the doses of the more important drugs.

Examinations will be held at stated times during the session by the professor to enable him to judge of each student's progress.

Laboratory Work.—During the past year a new laboratory of Materia Medica has been completed, which now occupies two floors of the Loomis Laboratory building. The Laboratory is provided with

a complete assortment of crude drugs and with all the various preparations of the Materia Medica; also with appliances for instruction in the methods of manufacturing pharmaceutical preparations. Instruments and appliances for special research in the physiological action of drugs have been added during the past year. The large classroom is supplied with sixty tables, equipped with gas, electric lights, water connections, and full apparatus, enabling each student to work separately under the supervision of the instructors.

The course of laboratory instruction is taken during the second year, and consists of six hours each week for half the year. The class is divided into small sections, which are under the personal supervision of the instructors. The method of teaching is distinctly practical. The student is made familiar by the laboratory work with the physical and chemical properties of drugs. This course includes such subjects as the forms of drugs, their weight and bulk, the measurement of solid and fluid drugs, methods of administering medicines, particularly with reference to appropriate combinations, and the study of solubilities. The subject of incompatibilities is clearly demonstrated.

Prescription-writing is taught throughout the course, and test prescriptions are compounded by members of the class.

MEDICINE.

W. Gilman Thompson, M.D., *Professor of Medicine.*

Professors of Clinical Medicine,

Alexander Lambert, M.D., Charles E. Nammack, M.D.,
Warren Coleman, M.D., Lewis A. Conner, M.D.

Instructors,

Dr. Dever S. Byard, Dr. C. N. Bancker Camac,
Dr. John W. Coe, Dr. Montgomery H. Sicard.

The Course of Medicine, extending over three years, is so graded that the student pursues a logical sequence of work through-

out. No didactic lectures upon Practice of Medicine are delivered, their place being wholly taken by bed-side instruction and recitations. The complete course comprises the following subdivisions (the Roman numerals indicate the years of the course in medicine, not those of the curriculum) :

I. Recitations from an elementary text-book.
   Normal Physical Signs of the Chest.

II. Recitations from an advanced text-book, including written reviews.
   Abnormal Physical Signs of the Heart and Lungs.
   Bed-side History-taking.
   Bed-side course in Symptomatology.
   Clinical Pathology.
   Bed-side course in General Medical Diagnosis.
   Eighteen lectures on General Symptomatology.
   General Hospital Medical Clinics.

III. Advanced bed-side course in Symptomatology and Diagnosis.
   Demonstrations of patients by the student before the class.
   Courses in the Out-Patient Clinic in the Heart and Lungs and General Medicine Classes.
   General Hospital Medical Clinics.
   Medical Conferences.
   Twelve lectures upon Diatheses, Toxæmias, etc.
   Elective advanced work in Clinical Diagnosis (Clinical Pathology, History-recording, etc.).
   Review quizzes for State Board examinations.

The details of the methods of instruction in medicine for each year of the curriculum are as follows :

I. Second-Year Students.

Recitations.—Second-year students begin the study of medicine with systematic recitations from an elementary text-book, in which the subjects of nomenclature, etiology, morbid anatomy, and typical symptoms only are dwelt upon.

Physical Diagnosis.—Normal physical diagnosis of the chest is taught to sections of ten students each in classes from the Dispensary under Dr. Byard. Each student is required to map out upon the patient the normal positions and sounds of the thoracic viscera, and toward the end of each course of twelve lessons a few abnormal cases are introduced for comparison.

II. Third-Year Students.

Recitations.—Third-year students recite twice a week from an advanced text-book on practice, special emphasis being given to symptomatology, complications, diagnosis, and treatment.

Written reviews are held at intervals to familiarize the student with examinations. All recitations are obligatory, and the recitation marks received form an important component of the final examination marks of the year.

Ward Work.—Systematic and obligatory ward work is begun in classes not exceeding fifteen students each, who accompany the Professor of Medicine on routine rounds through the hospital wards. Professor Thompson instructs at the Presbyterian Hospital until January, and at Bellevue until the close of the session. Repeated illustrations of all the common diseases are studied, and the advantage to the student of personally examining many cases of such diseases as typhoid fever, pneumonia, nephritis, cardiac ailments, etc., in different stages of development, and of following their daily progress, far outweighs the obsolete system of attendance upon didactic lectures. The student is first taught to observe and describe symptoms and investigate etiology, and as he attains proficiency is required to make diagnoses, offer prognoses, and suggest treatment.

General Diagnosis.—Dr. Coleman gives a special course in general medical diagnosis, in which at one lesson the student is required to examine, compare, and report upon each variety of pulse found in the ward ; at another, upon each variety of cachexia, anæmia, or œdema ; at another, upon each variety of abnormal liver

or spleen; and so on, comprising all the important physical examinations.

Clinical Laboratory Courses are conducted under Dr. Camac's supervision in immediate connection with the study of hospital and dispensary cases. In this laboratory the student acquires methods and technique which he is required to put in practice with patients. The laboratory is also used extensively by the visiting staffs of the Hospital and Out-Patient clinic for completing the data of their cases.

The class is divided into small sections, so that each member receives the personal assistance of the demonstrator. At the conclusion of the course a written examination is held, upon the result of which, as well as upon the character of the work done, each successful student is given a certificate to the effect that he has completed the course. Upon the presentation of this certificate to the demonstrator in charge, the student is allowed the use of the laboratory and its apparatus for the study of cases in the wards. When assigned to cases at the general medical clinic the student is required to report the result of his examination of the sputum, blood, urine, etc. Students of the fourth year, reporting at the medical conferences, for which longer time is allowed for preparation, make more extended research in the laboratory. Students are also, from time to time throughout the year, assigned to study cases in the Hospital and Dispensary; records are kept of these cases from which valuable clinical deductions may be made.

The apparatus employed is of such simple nature that it can readily be transported to the bed-side, the work being thus essentially practical and such as is a direct guide to diagnoses. The student *himself* uses the apparatus so that he may become familiar with its care and application.

Following is a brief outline of the course:

Blood.—Technique of obtaining blood specimens; normal constituents of blood; blood formation in bone marrow; corpuscle counting and hæmoglobin estimation; technique of fixing and stain-

ing specimens; diseased conditions determined by differential counting; study of blood-serum diagnoses; leucocytosis; malarial and other blood parasites; medico-legal value of blood stains.

Sputum.—Collection and examination of the gross specimen; disinfection of sputum cups, etc.; specimens of sputum in asthma, pneumonoconiosis, tuberculosis, gangrene and hemorrhage from the lungs, pneumonia, etc.; diphtheria and other bacilli.

Gastric Contents.—Examination of vomitus; administration of test meals; method of obtaining and examining gastric contents; lavage.

Fæces.—Method of obtaining and examining; intestinal parasites, and ova.

Urine.—Microscopic examination with reference to diagnosis; gonococci, tubercle bacilli, etc., seminal fluid in its medico-legal aspect, crystalline deposits.

Exudations and Transudations.—Ascitic and pleuritic effusions, cystic contents, vaginal discharges.

Each student is furnished typical specimens which he stains and studies at the demonstrations and preserves for future reference and comparison.

Physical Diagnosis.—Physical diagnosis of abnormal conditions within the chest is taught by Professor Lambert to classes not exceeding a dozen students each. This course of twelve lessons for each class is very comprehensive, owing to the large attendance at the class of heart and lung disease of the Bellevue Out-Patient Department and College Dispensary, from which the patients are derived.

General Medical Clinics.—General medical clinics are held weekly in the amphitheatre of Bellevue Hospital by the Professor of Medicine. At these clinics students read written histories of cases which they have studied on the previous day. They are required to demonstrate their findings upon the patient, and are questioned before the entire class in regard to diagnosis, etc. These clinics are also utilized by the Professor of Medicine to exhibit cases of exceptional rarity or difficult diagnosis. A second general medical clinic is held

weekly in the Bellevue amphitheatre by the Professor of Therapeutics, at which the effects of treatment are made the prominent feature.

Lectures.—A course of eighteen lectures upon general symptomatology is given by the Professor of Medicine, which is designed as introductory to the systematic bed-side teaching which he conducts upon hospital rounds.

III. Fourth-Year Students.

Fourth-year students attend the general ward classes and amphitheatre clinics with the Professor of Medicine as described for the third year, and also make systematic rounds through the wards with Professor Lambert and Nammack when on duty in Bellevue Hospital, and with Dr. Conner at the Hudson Street Hospital.

Lectures.—A course of twelve lectures is given by the Professor of Medicine upon such general topics as the diatheses, toxæmias, immunity, autointoxication, cachexias, etc.

Medical Conferences.—Under Dr. Coleman's direction, students are assigned to special cases which they study in detail for several weeks, reviewing the literature of the subject, and which they then report in writing at a medical conference, at which their fellow-students are called upon to offer criticisms and general discussion.

Students also attend special classes in the Dispensary, in which they assist in recording case histories and examining patients, and during the latter part of the year recite in a review quiz in preparation for hospital and State Board examinations. An elective course in advanced clinical pathology and diagnosis is offered in the fourth year.

SURGERY.

Lewis A. Stimson, M.D., *Professor of Surgery.*

Professors of Clinical Surgery,

Frederic S. Dennis, M.D., Frederick W. Gwyer, M.D.,
George Woolsey, M.D., Francis W. Murray, M.D.,
Frederick Kammerer, M.D., Percival R. Bolton, M.D.,
Alexander B. Johnson, M.D.

Instructors,

DR. JOHN ROGERS, JR., DR. BENJAMIN T. TILTON,
DR. ARCHIBALD E. ISAACS.

Assistants,

DR. WILLIAM F. STONE, DR. H. M. ARCHER.

Surgery will be taught in the recitation room, at the bedside, at hospital clinics, and by lectures.

In the second year the students are required to attend recitations on the principles of surgery two hours a week throughout the term. For this purpose the class is divided into small sections to insure thorough work; so far as time permits instruction will also be given at the bed-side.

In the third year recitations are continued upon regional surgery; the class is instructed in sections in Bellevue Hospital in history-taking and methods of surgical examination and diagnosis, two or three hours a week for part of the term; bed-side instruction is given in several hospitals to small groups, and formal clinics are held in Bellevue, New York, and other hospitals; about thirty lectures will be given by the Professor of Surgery, and a clinic for diagnosis is held once a week at which the students are required personally to examine and report upon the cases.

In the fourth year the students will receive clinical instruction in small groups in several hospitals and dispensaries upon general surgery and the special branches—eye, ear, nose and throat, genito-urinary diseases, dermatology and orthopædics; will attend the clinics and will have a review quiz in preparation for examination.

The members of the sections are trained in the examination of patients, the dressing of wounds and fractures, the administration of ether and assisting at operations.

The opportunities for the instruction in the special branches are exceptionally ample. There will be several clinical teachers in each subject, each with hospital and dispensary services. The student

will be enabled directly to examine and study cases, and will have a certain choice as to the time given to each branch.

Operative surgery will be taught in the fourth year in sections. The course consists of recitations, work upon the cadaver, and bandaging. As the material is abundant, each member of the class will perform the principal surgical operations.

OBSTETRICS.

J. Clifton Edgar, M.D., *Professor of Obstetrics and Clinical Midwifery.*

Instructors,

Dr. George D. Hamlen, Dr. George G. Ward,
Dr. George P. Shears,
Dr. Gustave Seeligmann.

Instruction in obstetrics will be given during the second, third, and fourth years by—

1. Recitations. 2. Illustrative Lectures. 3. Obstetric Clinics and Conferences. 4. Attendance upon Cases of Confinement. 5. Manikin Practice and Section Work. 6. Obstetric Histology, Pathology, and Bacteriology.

1. Recitations from a standard text-book will be held by an instructor in obstetrics during the second year upon the physiology, and during the third upon the pathology, of obstetrics, the latter including obstetric surgery.

These recitations are so scheduled as to cover the entire field of the subject laid out for the college year, are supplementary to the work of the Professor of Obstetrics during each of these two years, and prepare the student for an intelligent appreciation of his subsequent illustrative lectures, obstetric conferences, attendance upon cases of confinement, clinics, and manikin practice.

2. The Illustrative Lectures comprise a systematic course, running through the third year, upon the physiology and pathology of obstetrics.

These lectures are theoretical to a limited extent only, being mainly demonstrative and illustrative in character. To this end ample blackboard space is used, as well as an abundant collection of pelves, entire, normal and deformed, mesial sections of the same, and in addition a supply of diagrams, charts, carefully selected plaster, composition, and metal models, wet and dry preparations, and instruments.

In conjunction with these lectures additional recitations are held by the Professor of Obstetrics upon the subject-matter of the college year and for final review.

3. Obstetric Clinics and Conferences.—A weekly obstetric clinic is held throughout the year, for both the third- and fourth-year classes. At this clinic abnormal cases of pregnancy, labor, and the puerperium are demonstrated, and the major and minor obstetric operations performed.

In addition, infant feeding and the care of mother and child during the lying-in period and early infancy are taught. During both the third and the fourth year, members of the class will be called upon in rotation to examine patients and discuss etiology, diagnosis, prognosis, and treatment. These "obstetric conferences" will review the illustrative lectures, manikin work, and the student's work in his attendance upon confinement cases. By this means each individual student's standing in the department of obstetrics is ascertained. During the latter half of the second year six obstetric clinics are given at the hospital. Attendance upon these clinics is optional.

4. Attendance upon Cases of Confinement.—Each candidate for the degree of M.D. is required to present satisfactory evidence to the effect that he has attended a definite number of cases of confinement.

During the student's attendance upon his practical maternity course he may be excused from the exercises of the College during the fourth college year, otherwise he shall take his practical obstetric course during vacation time.

5. Manikin Practice and Section Work.—Manikin prac-

tice is given to sections of the class during the fourth or senior year, and consists of work by individual students upon the manikins, under the supervision and criticism of an instructor.

The mechanical phenomena of labor; modes of delivery; abnormal presentations and positions, with methods of delivery of each; version; application of the forceps, and other manipulations, will be demonstrated by the instructor and performed by the student.

Diagrams, models, casts, wet and dried specimens, will be used in the demonstrations.

The sections will also be instructed at the bed-side in the management of pregnant and parturient women, the care of the new-born child, abdominal palpation, and pelvic mensuration.

6. Obstetric Histology, Pathology, and Bacteriology.—Laboratory instruction is given during the third year by the Professor of Pathology upon the histology of the vulva, vagina, uterus, ligaments, Fallopian tubes, and ovaries in the pregnant and non-pregnant conditions, and upon the histology and pathology of the decidua, chorion, placenta, and umbilical cord.

GYNÆCOLOGY.

WILLIAM M. POLK, M.D., *Professor of Gynæcology and Obstetrics.*

Instructors,

DR. CHARLES C. BARROWS, DR. WILLIAM TRAVIS GIBB,
DR. GEORGE D. HAMLEN, DR. JOHN ASPELL.

Instruction in gynæcology is given by recitations, lectures, ward- and class-room demonstrations, clinics, and laboratory demonstrations.

Six Lectures, upon topics selected for their special interest and importance to the subject as a whole, will be given at the beginning of the third year.

Recitations are planned to cover the entire subject and are

held one hour a week during the third year of the course. In order that the instruction throughout the department may be as nearly in unison as possible, a synopsis of the subject-matter of each lesson is prepared by the instructor and amended and revised by the head of the department. This is presented to the student for comparison with his text-book, to which it is an addendum. This method insures the coöperation of the head of the department in the groundwork of his subject and enables him to keep in touch with each student until his graduation.

Classroom and Ward Demonstrations are given to sections of the fourth-year class twice a week throughout the year. This instruction includes the examination of patients by the students, who are thereby drilled in the methods of physical diagnosis as applied to the pelvis. When necessary the patients are anæsthetized.

The routine of treatment appropriate to the various conditions found is demonstrated, the students assisting when possible. In this way, not only is familiarity acquired with normal conditions within the pelvis and the various departures from this state induced by disease, but opportunity is afforded to see and put in practice actual measures of relief and to watch the subsequent course and treatment of these cases.

Operations are performed three days every week at which the several sections are enabled to study the detail of every operation peculiar to this department.

A General Clinic is held once a week at which students selected in rotation are required to examine the patient, make a diagnosis, and suggest treatment. They are questioned before the class upon all these topics, as they relate to the case in hand, so as to determine the correctness of their conclusions. Should operation be called for, it is then performed.

Laboratory Demonstrations of secretions, discharges, and specimens obtained from patients who come under observation during this course are made to sections of the third-year class as a part of the course in clinical pathology.

PATHOLOGY.

INCLUDING HISTOLOGY, GROSS AND MICROSCOPICAL PATHOLOGY, AND BACTERIOLOGY.

James Ewing, M.D., *Professor of Pathology.*
Dr. Bertram H. Buxton, *Instructor in Bacteriology.*
Dr. Otto H. Schultze, *Instructor in Gross Pathology.*
Dr. Jeremiah S. Ferguson, *Instructor in Histology.*
Dr. Max G. Schlapp, *Instructor in the Histology and Pathology of the Nervous System.*
Dr. James C. Johnston, *Instructor in Pathology.*
Dr. Guy D. Lombard, *Assistant Instructor in Histology.*
Dr. Henry S. Pascal, *Assistant Instructor in Histology.*
Dr. Henry T. Lee, *Assistant Instructor in Pathology.*
Dr. Alfred E. Thayer, *Assistant Instructor in Gross Pathology.*
Dr. Letchworth Smith, *Assistant Instructor in Bacteriology.*
Dr. John Howland, *Assistant Instructor in Bacteriology.*

HISTOLOGY.

The work in this subject is conducted throughout the first and during a portion of the second year by laboratory exercises and by recitations. Laboratory exercises, in two-hour sessions weekly during half of the second year, occupy in all about 150 hours for each student. The work covers the construction and use of the microscope, the methods of preparing microscopical sections of tissues, and the normal histology of the various tissues and organs of the human body. Attention is constantly directed to the application of the knowledge to physiological phenomena, and to further this end the courses in physiology and histology proceed as far as possible in unison. When desirable the structure of human tissues and organs is illustrated by sections of embryonal and lower vertebrate tissues.

In the first year the blood and simple tissues, the gastro-intestinal tract and adnexa, and the respiratory, circulatory, and genito-urinary

organs are studied. In the second year the organs of the special senses and the nervous system are considered.

Recitations.—One recitation weekly for each student is held during the first year, and the first half of the second year, on subjects assigned from the text-book on histology. These recitations are designed to completely familiarize the student with the structure of the tissues considered during the previous week in the laboratory exercises.

An examination is held at the end of each year. The standing of the student in this, as in the other subjects, is determined equally from the work in the laboratory exercises and in the recitations.

PATHOLOGY.

The course of instruction in pathology gives in the second year a preliminary course of lectures on the theory and classification of inflammations, which is designed to acquaint the student with the main facts in this field, to prepare him for preliminary studies in medicine and surgery, and to establish a uniform system of nomenclature to be used in this and other departments. During one half the second year, also, attendance is required at one weekly demonstration in gross pathology, at which the more common visceral lesions are exhibited. This course is designed to accompany the preliminary recitations in medicine and surgery of the second year.

The main branches of the subject are grouped in the third year in order to secure the simultaneous study of the gross and microscopical changes in diseased tissues. In the fourth year the students perform autopsies, and attend one recitation weekly in review of the entire subject.

Microscopical Demonstrations in Pathology.—The microscopical demonstrations occupy three two-hour sessions weekly throughout the year, in all about 175 hours, and they constitute the main features of the instruction in this department. The specimens studied illustrate the topics of inflammation, tumors, autointoxications, infectious diseases, and diseases of the nervous system, and are

supplemented by lectures, and special demonstrations by means of sections, charts, lantern slides, and micro-photographs.

Demonstrations in Gross Pathology.—On the days alternating with the microscopical studies demonstrations of gross pathological specimens are given to the students of the third year, with the material collected from autopsies. With the viscera of each case is presented an epitome of the clinical history, and, when necessary, frozen sections of the organs, and the clinical symptoms are explained from the gross and microscopical changes in the altered tissues. The student here sees the viscera of many of the fatal cases which he has studied in the wards of the hospital.

Gross pathological diagnosis is taught as a separate branch of this subject, not bearing directly on the clinical aspect of the case.

These demonstrations occupy three two-hour sessions weekly, each section of the class attending one exercise weekly throughout the year.

Post-Mortem Examinations.—Students of the fourth year are required to perform autopsies under the direction of the instructor in gross pathology, when they are made familiar with the technical procedures required in ordinary and in medico-legal cases.

Recitations.—One recitation weekly is required of each student throughout the third and fourth years. In the third year they cover the work of each preceding week. In the fourth year they are held by the Professor of Pathology and cover the entire work of the department.

BACTERIOLOGY.

The laboratory course in bacteriology occupies three two-hour sessions each week for one-third of the second year—in all, sixty hours for each student. The student is first made familiar with the methods of disinfection, and is required to prepare the ordinary culture media. The work then proceeds to the methods of staining and examining bacteria; their artificial cultivation and the study of biological characters; the methods employed in the separation of species;

the general relation of pathogenic bacteria to disease; and concludes with the biological analysis of air, water, soil, and milk. Cultures are made from the viscera of cases of the various infectious diseases, and the student is required to cultivate and identify the important pathogenic micro-organisms. The work is supplemented when necessary by the use of pure cultures, by the exhibition of anærobic cultures, and to a limited extent by inoculation in animals.

An Advanced Course in bacteriology is offered to those students who have been able in the first year to attend the course required in the second year.

This course includes the cultivation of other pathogenic micro-organisms, the separation of species, and the bacteriological examination of viscera secured at autopsies.

Advanced Courses and Original Research.—The abundant facilities of the Loomis Laboratory on the fourth floor of the new building can be offered to properly qualified students and practitioners of medicine who wish to pursue advanced courses of study on lines of original research, under the direction of special instructors.

SPECIAL DEPARTMENTS OF MEDICINE AND SURGERY.

DISEASES OF CHILDREN.

JOSEPH E. WINTERS, M.D., *Professor of Diseases of Children.*

Instructors,

DR. WILLIAM SHANNON, DR. WALTER A. DUNCKEL.

Assistants,

DR. ROBERT S. ADAMS, DR. HORACE S. STOKES.

This department will embrace clinical instruction and section teaching in all the important diseases of infancy and childhood.

There will be one clinical lecture each week in the College build-

ing, and clinical lectures in the Willard-Parker Hospital on scarlet fever and diphtheria.

In connection with the Dispensary of the Children's Department in the new College building there will be an amphitheatre for section teaching and isolation rooms for contagious diseases, so that students will have ample opportunity for the personal study of disease.

Three hours each week will be devoted to section teaching in the Dispensary to the students of the fourth year.

Students will be required to examine sick children and discuss the diagnosis and treatment of patients assigned to them.

Special attention is given to the hygiene and feeding of infants; the digestive disorders of infants; the dietetics of childhood and the food disorders of infancy and childhood; the anatomical and physiological peculiarities of infancy and childhood; and the influence these peculiarities have on the manifestations of disease in children.

One of the distinguishing features of this department will be the instruction of each student in the art of diagnosis, by the professor in charge.

There will be practical bed-side illustrations of the management, care, and therapeutics of all the acute diseases of infancy and childhood.

In the clinical laboratory microscopical examinations will be made of secretions and excretions, of lesions of the mouth and throat, and of sections of anatomical lesions of the important diseases of childhood.

SURGICAL DISEASES OF THE GENITO-URINARY ORGANS.

SAMUEL ALEXANDER, M.D.,
Professor of Genito-Urinary Surgery.

Instructors,

DR. MARTIN J. ECHEVERRIA, DR. NEWTON B. WALLER,
DR. CHARLES L. GIBSON.

Assistant,

DR. FRANCIS E. SHINE.

The course is required of students during the third and fourth years, and is designed to give instruction in diagnosis and treatment of the surgical diseases of the male genital and urinary organs and in syphilis. It consists in recitations, lectures, clinics, and bed-side instruction in Bellevue Hospital, and section work in the Dispensary of the College.

Recitations.—Recitations will be held during the third and fourth years by the instructors in the department of general surgery.

Lectures.—One lecture a week from the opening of the term to the first of December will be given by Professor Alexander at the College. This course of lectures is designed to prepare students for the clinical work, and special attention will be given to the principles of diagnosis and the symptomatology of the surgical diseases of the urinary organs.

Clinic.—A clinic will be given in the amphitheatre of Bellevue Hospital once each week after the first of January by Professor Alexander. At this clinic the principal operations upon the male urinary and genital organs will be performed before the class, and special attention will be given to the subject of diagnosis. Attendance upon these clinics is required by students during the third and fourth years. A syllabus containing the history of the cases presented at each clinic will be given to each member of the class.

Section Teaching at the College Dispensary and at Bellevue Hospital.—The third-year class will be divided into sections of small size, and instruction will be given by the Chief of Clinic and the instructors in the Department in the College Dispensary. Special attention will be given in this course to the diagnosis and treatment of the venereal diseases and the use of special instruments. A syllabus of these lectures will be furnished to each member of the class.

The fourth-year class will be divided into sections of small size, and instruction will be given in the wards of Bellevue Hospital or in the College Dispensary by Professor Alexander. This course will be devoted principally to the diseases of the urinary organs and to instruction in the use of special instruments and apparatus and the

post-operative treatment of cases. The course will be continued throughout the entire session.

NERVOUS DISEASES.

CHARLES L. DANA, M.D.,
Professor of Diseases of the Nervous System.

Instructor,
DR. JOSEPH FRAENKEL.

Assistants,
DR. ROBERT M. DALEY, DR. J. RAMSAY HUNT.

The regular work consists of a preliminary series of lectures by Professor Dana, in which the general outline of the work for the year is given, with demonstrations of the general anatomy, general symptomatology, and methods of examination of the nervous system. During the rest of the term clinical lectures on nervous diseases are held weekly in the amphitheatre of Bellevue Hospital. Section work is also given weekly to classes in the wards of Bellevue Hospital.

During part of the term special section work in clinical neurology and electro-therapeutics is given the students of the fourth year by the instructor or clinical assistants. Opportunities for special studies in clinical neurology are given students in classes under Dr. Fraenkel.

It is considered of the greatest importance that the student of nervous diseases be thoroughly grounded in the anatomy and physiology of the nervous system, therefore courses in gross and microscopical anatomy of the nervous system are provided in the histological laboratory. Special students can also take courses on the pathology of the nervous system.

Thus the course of instruction aims to provide the student before he graduates with instruction in the microscopical anatomy of the nervous system, in its physiology and pathology, and also that he shall receive practical clinical instruction in the amphitheatre, at the bedside, and in the dispensary.

MENTAL DISEASES.

ALLAN MCLANE HAMILTON, M.D., F.R.S.E.,
Professor of Mental Diseases.

Instructor,
DR. WILLIAM HIRSCH.

Assistant,
DR. GEORGE DE FOREST SMITH.

The Professor of Mental Diseases will give a series of clinical and didactic lectures once a week for two months, illustrated by the lantern and cinematograph. Clinics will also be given at the asylum once a week during the latter part of the course.

Instruction will also be given in diagnosis, the legal commitment of the insane, and the relations of insanity to medical jurisprudence.

DERMATOLOGY.

GEORGE T. ELLIOT, M.D., *Professor of Dermatology.*

Instructors,
DR. THURSTON G. LUSK, DR. HENRY H. WHITEHOUSE.

Instruction in Dermatology will be given by the clinical professor and his assistants. No teaching will be given didactically, but the cutaneous diseases will be demonstrated on the living subject. Abundance of material for such instruction is obtainable, and the student can thoroughly familiarize himself with the more common as well as with the rarer diseases of the skin by actual personal contact and observation. Attention is particularly paid to the diagnosis and the etiology of skin diseases, but their therapeutics also receive due consideration.

LARYNGOLOGY AND RHINOLOGY.

CHARLES H. KNIGHT, M.D., *Professor of Laryngology.*

Instructor,

DR. JAMES E. NEWCOMB.

Assistants,

DR. JOHN FREELAND, DR. FRANK T. BURKE.

Instruction in Laryngology and Rhinology is given by clinical lectures at the College by the professor of the department. The subjects then considered are demonstrated to the fourth-year students by the assistants. The class is divided into sections, and each member is expected to examine patients and perform manipulations. The clinics are fully illustrated by plates and models, and, as far as possible, by clinical material.

OPHTHALMOLOGY.

CHARLES STEDMAN BULL, M.D., *Professor of Ophthalmology.*

Instructors,

DR. ROBERT G. REESE, DR. COLMAN W. CUTLER.

Instruction in Ophthalmology consists in lectures at the College building once a week, during the months of October, November, and December, and in sectional teaching two hours a week at the College Dispensary throughout the year. The weekly lectures at the College are mainly didactic, and consider the subjects of physiological optics, the theory of the ophthalmoscope, refraction and accommodation, the anomalies of the ocular muscles, and the deep lesions of the eye which are not susceptible of clinical demonstration. Thus the entire field of ophthalmology is covered. The sectional teaching at the College Dispensary is devoted partly to clinical ophthalmology and the use of the ophthalmoscope, and partly to instruction in the errors of refraction and the rudiments of the fitting of lenses.

OTOLOGY.

GORHAM BACON, M.D., *Professor of Otology.*

Instructor,

DR. FRANKLIN M. STEPHENS.

Assistants,

DR. EARLE CONNER, DR. GEORGE SLOAN DIXON.

During the first third of the fourth year a systematic course of weekly lectures is given. These lectures are practical in character, including a consideration of the anatomy and physiology of the ear and the various methods of examination. Patients are shown to the class in order to familiarize the students with the symptoms and character of the more important diseases.

For the fourth-year students, the class is divided into sections for clinical instruction in the Dispensary. Each student receives practical instruction from Professor Bacon and his assistants in the examination of patients, the use of the otoscope, and the various methods of testing the hearing. The student is permitted to examine patients and, after a probationary period, to prescribe for them and thus gradually assume the duties of a clinical assistant. The students have also an opportunity of witnessing the more important operations in aural surgery, including intracranial complications.

ORTHOPÆDIC SURGERY.

NEWTON M. SHAFFER, M.D., *Professor of Orthopædic Surgery.*

Instructors,

DR. P. HENRY FITZHUGH, DR. JOHN McGAW WOODBURY.

Assistant,

DR. HENRY SCOTT.

The course of study in the Orthopædic Department includes a stated clinical lecture once a week, with detailed demonstrations in sectional work twice a week during two months of the year.

During the regular clinical course especial attention is given to the early recognition of the deforming diseases of childhood, also to the symptomatology, pathology, and differential diagnosis of chronic and progressive deformities, including the mechanical and operative treatment.

In detail, the course consists of practical illustrations of methods of treatment, the apparatus used being thoroughly explained both in construction and in principle, attention being called to even minute points of construction and use. The operative side is fully dwelt upon, the indications for operative interference as an adjunct to the mechanical work being demonstrated. Ample clinical material is provided, and models of conventional forms of apparatus are placed at the disposal of students.

In the section and laboratory work the student is required to assist in the management of selected cases, to familiarize himself with the various methods of treatment, to construct the simpler forms of apparatus, to secure a practical knowledge of the details of construction of the more complicated instruments, and to familiarize himself with the pathological conditions existing in the deformities of childhood.

DEPARTMENT OF HYGIENE.

WILLIAM R. WILLIAMS, M.D., *Lecturer.*

Instruction is given in this course to students of the fourth-year class by lectures and demonstrations one hour a week during half of the year.

The course is designed to enable physicians and health officers to cope with preventible disease.

The lectures treat of the hygienic relations of foods, water, clothing, schools, dwellings, and hospitals. Special attention is given to the prevention of infectious diseases by a study of their etiology and methods of transmission, and the subject of immunity. This part of the course supplements the work of the Department of Bacteriology. The hygienic aspects of marriage and heredity are also considered.

SUMMARY OF THE PLAN OF INSTRUCTION.

FIRST YEAR.

1. Anatomy. — One lecture and two recitations each week throughout the year.

Section demonstrations.—Two hours weekly until January, then one hour a week for the remainder of the session.

Embryology.—Six lectures on embryology during the month of March.

Dissection.—Three to five courses of four weeks each, ten or more hours weekly.

2. Physiology.—Two recitations each week. One lecture a week during the first half and two lectures a week during the second half of the session.

3. Chemistry and Physics.—Two lectures each week and one recitation-lecture on physics. Recitations two hours each week on inorganic chemistry. Chemical laboratory four hours each week throughout the session.

4. Histology.—Recitations two hours and laboratory four hours each week throughout the year.

5. Electives.—*a*. Laboratory pharmacology. *b*. Physiological chemistry. *c*. Bacteriology. These courses are open to certain advanced students as described on page 37 of the announcement.

In the course of the session three written reviews are held in the subjects recited upon. The papers are examined by the professors of the respective branches.

SECOND YEAR.

1. Anatomy.—Surgical and regional anatomy. Three lectures weekly. Recitation one hour each week. One demonstration lecture weekly. Section demonstrations one hour each week. Dissec-

tion, two to four courses of four weeks each, ten or more hours weekly.

2. Physiology.—Recitations two hours each week during the first half and one hour each week during the second half of the session, including a review of the work of the first year. Two lectures a week during the first half, and one lecture a week during the second half of the session.

3. Organic and Physiological Chemistry.—Two lectures each week. Recitation once a week.

Laboratory organic and physiological chemistry. Two hours weekly until February, then four hours weekly until the end of the session.

4. Histology.—Recitation one hour weekly, and laboratory work two hours weekly, throughout the session.

5. Pathology.—Ten lectures at the beginning of the year.

6. Gross Pathology.—One demonstration weekly for half the year.

7. Pharmacology.—Laboratory work six hours each week for half the session.

8. Medicine.—Recitation one hour weekly.

Physical diagnosis.—Three hours weekly for four weeks.

9. Surgery.—Recitations two hours weekly.

10. Obstetrics.—One weekly recitation. Six obstetric clinics (optional).

11. Bacteriology.—Laboratory work, six hours each week, for one-half of the session.

12. Electives.—*a*. Bacteriology. *b*. Materia medica recitations of the third year. *c*. Manikin course in obstetrics. *d*. Obstetrical clinic.

The conditions under which certain students may avail themselves of these electives are stated on page 38 of the announcement.

The study of the following branches is completed during the second year, and the examinations on them are final: (1) Anatomy (written and practical); (2) Chemistry and Physics; (3) Pharmacology; (4) Physiology; (5) Bacteriology.

THIRD YEAR.

1. Medicine.—Recitations two hours each week. Physical diagnosis in sections in the Dispensary. General medical diagnosis in sections at the bed-side. General medical clinics two hours each week in Bellevue Hospital. Ward visits in small sections with the Professor and Clinical Professors of Medicine in Bellevue and other hospitals. Eighteen introductory lectures.

2. Pathology.—Laboratory work six hours and recitations one hour weekly throughout the year.

3. Gross Pathology.—One demonstration weekly throughout the year.

4. Clinical Pathology (chemical and microscopical).—Twenty-five laboratory exercises of two hours each.

5. Materia Medica.—Recitations two hours each week.

6. Therapeutics.—Lectures once each week until January, then twice a week; one hour a week bed-side teaching in Bellevue Hospital throughout the year. Clinic once a week.

7. Obstetrics.—One illustrative lecture weekly. One recitation weekly. One clinic weekly.

8. Gynæcology.—Clinic in Gynæcology once a week. Lectures, six at the beginning of the year.

9. Surgery.—Lectures, thirty hours. General surgical clinics, two each week. Bed-side teaching, diagnosis, and history-taking in sections in Bellevue Hospital. Ward work in small sections in Bellevue, St. Francis, German, and the New York hospitals with the Professor and Clinical Professors of Surgery. Recitations on regional surgery two hours weekly.

10. Toxicology.—Lecture one hour each week for half the year.

11. Diseases of Children.—Clinic one hour each week.

12. Genito-Urinary Surgery.—Clinics once a week after January 1st.

13. Neurology.—Lectures once a week for the first five weeks. Clinics once a week for the following twenty weeks.

Dispensary teaching in one-hour periods for four weeks.

FOURTH YEAR.

1. Medicine.—Ward work in the hospitals. General medical clinics twice a week. Exercises in history-taking and in clinical microscopy continued. Twelve lectures. Recitations, conferences.

2. Surgery.—Ward work in the hospitals. General surgical clinics twice a week. Section work and clinics in the special branches. Operative surgery in sections. Recitations.

3. Therapeutics.—Lectures one hour a week. Recitation once a week. Clinical instruction in Bellevue Hospital. Section work in the College Dispensary in the treatment of diseases and in the writing of prescriptions.

4. Obstetrics.—Lectures one hour a week. Attendance upon cases of confinement. Manikin practice and section work. One obstetric clinic weekly. Recitations.

5. Pathology.—One review recitation a week.

6. Technique of Autopsies.—One exercise a week for a portion of the year.

7. Gynæcology.—Clinic one hour each week and ward demonstrations two hours each week. Recitations.

8. Diseases of Children.—Section teaching two hours each week. Clinic one hour each week. Clinical pathology.

9. Genito-Urinary Surgery.—Lectures one hour a week until December 1st. Clinics one hour a week after January 1st. Section work twice a week throughout the session.

10. Neurology.—Twenty clinics. Section work two hours a week in Bellevue Hospital.

11. Mental Diseases.—Twelve lectures. Clinics once a week for two months.

12. Dermatology.—Section work.

13. Laryngology and Rhinology.—Fifteen lectures. Section work.

14. Ophthalmology.—Ten lectures. Section work.

15. Otology.—Six lectures. Section work.

16. Physiology.—Two lectures a week during the first five weeks of the session on the physiology of the special senses.

17. Orthopædic Surgery.—Fifteen lectures. Section work.

18. Hygiene.—One lecture a week for three months.

19. Review Recitations.—For State Board examinations. During the last two weeks of the term in materia medica, chemistry, physiology, anatomy and pathology throughout the session.

EXAMINATIONS.

REQUIREMENTS FOR ADVANCEMENT IN COURSE.

Students are advanced in course from one year to the next upon passing examinations in the work of that year. As in the academic department of the University, the work of each year is considered final of itself. There is no unnecessary repetition of subjects taught from year to year. Students who have not succeeded in passing all their examinations will be allowed to enter upon the next year's studies, provided they pass examination in the subjects failed in at the beginning of the session.

Examinations for advancement in course, graduation, and admission to advanced standing are held at the close of the year on the work of the year. In each laboratory course extending through a part of the year only, the examination is held at the close of the course.

Examinations for conditioned students and those desiring admission to advanced standing, who have not taken the spring examinations, are held during the first fortnight of the fall term.

The subjects examined upon are divided into major and minor subjects.

The minor subjects embrace laboratory courses and those in which instruction is given by recitations only.

Subjects of Examination for Admission to the Second Year.

Major Subjects . . Anatomy (except the nervous system, viscera, and organs of special sense).
Inorganic Chemistry and Physics.
Physiology (except the nervous system and organs of special sense).

Minor Subjects . . Histology (except the nervous system and organs of special sense).
Laboratory Inorganic Chemistry.

Conditions allowed (at the spring examinations): 1 Major and 1 Minor; or 2 Minor.

NOTE 1. In each of the laboratory courses of the first and subsequent years, students whose marks fall below a certain percentage will be allowed one reëxamination within two weeks of the completion of the course, failing in which they must repeat the laboratory course with the next succeeding section.

Students whose marks fall below this percentage in the chemical laboratory cannot be reëxamined, but must repeat the course with the next succeeding section.

NOTE 2. In each of those branches in which recitations are held throughout the year, there shall be two written reviews conducted by the instructors and supervised by the professor in charge of the department, and also a final written review conducted by the professor himself at the close of the year. The two written reviews conducted by the instructors shall be held, the one about the end of November, the other about the close of February, and shall count as a single recitation, the object being to ascertain the knowledge acquired by the student.

NOTE 3. *All conditions must be successfully passed before entrance into the next succeeding year will be allowed.*

Subjects of Examination for Admission to the Third Year.

Major Subjects.. Anatomy.
Organic Chemistry.
Physiology.

Minor Subjects.. Medicine.
Surgery.
Obstetrics.
Bacteriology.
Normal Histology (central nervous system and organs of special sense).
Pathology.
Pharmacology.
Laboratory Organic Chemistry.

Conditions allowed: 1 Major and 1 Minor; or 2 Minor subjects.

(See Notes 1, 2 and 3, page 76.)

Subjects of Examination for Admission to the Fourth Year.

Major Subjects.. Materia Medica.
Toxicology.
Pathology.

Minor Subjects.. Obstetrics and gynæcology.
Medicine.
Surgery.
Pediatrics. } Clinical Paper.
Neurology. }

Conditions allowed: 1 Major and 1 Minor; or 2 Minor.

(See Notes 1, 2 and 3, page 76.)

Subjects of Examination for Graduation at the End of the Fourth Year.

Medicine.
Surgery.
Obstetrics and Gynæcology.
Therapeutics.

Special Subjects:

- Hygiene.
- Mental Diseases.
- Neurology.
- Ophthalmology.
- Otology.

} Clinical Paper.

- Laryngology and Rhinology.
- Pediatrics.
- Dermatology.
- Genito-Urinary Diseases.
- Orthopædic Surgery.

} Clinical Paper.

The recitation average in the primary branches reviewed in this year will be taken into consideration in determining the class standing at the end of the year.

Students conditioned in only one subject at the end of the fourth year will be given an opportunity to make up the condition within two weeks. If the second examination is satisfactory he may receive his degree at the Commencement at Ithaca.

Those conditioned in more than one subject or who fail to pass in the second examination just mentioned must repeat the work of the fourth year.

REQUIREMENTS FOR GRADUATION.

1. Candidates for the degree of doctor of medicine must have studied medicine for four full years in an accredited medical college, and the fourth year at least must have been spent in the Cornell University Medical College.

2. Candidates must present satisfactory evidence of good moral character and of being not less than twenty-one years of age.

3. Candidates must file with the Secretary of the Faculty the Regents' medical-student certificate as evidence of having complied with the requirements for admission. (Before entering the first year at least 36 counts must have been obtained; before entering the second year the full certificate of 48 counts must be filed with the Secretary.)

4. Candidates must have dissected at least seven parts in anatomy (see page 43). They must, further, have taken the regular course of two weeks in practical obstetrics.

5. In addition to the yearly examinations above specified for advancement in course, candidates must pass at the end of the fourth year examinations in medicine, surgery, therapeutics, obstetrics and gynæcology, and the special branches as are specified on page 78.

6. Candidates rejected at the final examination will not be re-examined until after having repeated their fourth year of study.

Before being readmitted to the fourth year the candidate must pass a satisfactory examination in anatomy, physiology, chemistry and physics, and materia medica.

7. The degree will not be conferred upon any candidate who absents himself from the public Commencement without the special permission of the Faculty.

8. The Faculty reserves the right to terminate the connection of any student with the institution *at any time* on the ground of what they may deem moral or mental unfitness for the profession, or improper conduct while connected with the College.

REQUIREMENTS FOR LICENSE TO PRACTISE MEDICINE IN THE STATE OF NEW YORK.

All requirements for admission should be filed at least one week before examination.—They are as follows:

1. Evidence that applicant is more than twenty-one years of age (Form 1).

2. Certificate of moral character from not less than two physicians in good standing (Form 2).

3. Evidence that applicant has the general education required

preliminary to receiving the degree of bachelor or doctor of medicine in this State (medical-student certificate. See examination handbook).

4. Evidence that applicant has studied medicine not less than four full school years of at least nine months each, in four different calendar years, in a medical school registered as maintaining at the time a satisfactory standard. New York medical schools and New York medical students shall not be discriminated against by the registration of any medical school out of the State, whose minimum graduation standard is less than that fixed by statute for New York medical schools.

The increase in the required course of medical study from three to four years did not take effect till January 1, 1898, and does not apply to students who matriculated before that date and will receive the degree of M.D. before January 1, 1902 (Form 1).

First exemption: "The Regents may in their discretion accept as the equivalent for any part of the third and fourth requirement, evidence of five or more years' practice of medicine, provided that such substitution be specified in the license."

5. Evidence that applicant "has received the degree of bachelor or doctor of medicine from some registered medical school, or a diploma or license conferring full right to practise medicine in some foreign country" (Form 3 of original credentials).

6. The candidate must pass examinations in anatomy, physiology and hygiene, chemistry, surgery, obstetrics, pathology and diagnosis, therapeutics, practice, and materia medica. The questions "shall be the same for all candidates, except that in therapeutics, practice, and materia medica all the questions submitted to any candidate shall be chosen from those prepared by the board selected by that candidate, and shall be in harmony with the tenets of that school as determined by its State Board of Medical Examiners."

Second exemption: "Applicants examined and licensed by other State examining boards registered by the Regents as maintaining standards not lower than those provided by this article, and appli-

cants who matriculated in a New York State medical school before June 5, 1890, and who received the degree of M.D. from a registered medical school before August 1, 1895, may, without further examination, on payment of $10 to the Regents, and on submitting such evidence as they may require, receive from them an indorsement of their licenses or diplomas, conferring all rights and privileges of a Regents' license issued after examination."

7. A fee of $25 payable in advance.

FINAL EXAMINATION IN THE SUBJECTS OF THE FIRST AND SECOND YEARS.

A law passed at the last session of the legislature permits students to take part of their examinations for the license to practise medicine in this State at the end of the second year. The Regents have therefore published a notice that examinations in Anatomy, Physiology, Hygiene, and Chemistry will be held during September, 1901, for students who have completed the second year of their medical course. The applicant must be twenty-one years of age, of good moral character, have the requisite preliminary education required by law, and pay a fee of $25.00.

Diplomas of Licentiate of the Royal College of Physicians of London and Membership of the Royal College of Surgeons of England.

Graduates of the Cornell University Medical College are admitted to the final examination for the diploma of Licentiate of the Royal College of Physicians of London and Membership of the Royal College of Surgeons of England, upon presenting proper certificates that certain conditions applicable to the foreign universities and colleges which are recognized by the examining board have been complied with.

Further information may be obtained from the Secretary of the Board (Mr. F. G. Hallett) at the Examination Hall, Victoria Embankment, London, W. C.

PRIZES.

The Harriet Crocker Alexander prizes, the first of $150, the second of $50, are awarded, the first to the student having the highest record, and the second to the student having the next highest record in the Graduating Class.

HOSPITAL APPOINTMENTS.

The students and graduates of the Cornell University Medical College are entitled to compete on equal terms with those of other colleges for positions on the resident staff of Bellevue and the other hospitals of the city.

Some of these hospitals are: The City, Harlem, Gouverneur, New York, St. Luke's, Roosevelt, Presbyterian, St. Vincent's, St. Francis', Mount Sinai, German, and Hudson Street Hospitals, New York Eye and Ear Infirmary, and the hospitals in Brooklyn and Jersey City, Newark, Paterson, etc.

The requirements, the times of examination, and the period of service differ. The details can be learned by application, written or in person, to the superintendents or to the secretaries of the medical boards of the various hospitals.

SUMMER SCHOOL.

Cornell University will continue during the summer of 1901 the Summer School which has proved of so much advantage.

The courses will cover the period from May 15th to August 1st, and the instruction will be chiefly clinical, with laboratory work and quizzes added.

The instruction has been especially arranged to economize time and furnish the greatest amount of varied clinical practice possible.

The subjects embrace clinical instruction in medicine, surgery, and the various specialties; laboratory courses in histo- and clinical pathology, bacteriology, and toxicology, and quizzes in anatomy surgery, materia medica and therapeutics, and medicine.

A pamphlet giving full details can be obtained by application to the Secretary of the College.

BOARD.

Arrangements are made by the Clerk so that each matriculant of the College will be furnished with lists of good boarding-places at a convenient distance from the College building, at the very low rate of $5 to $6 per week. Further information may be obtained from the Clerk, at his office in the College, or from the Secretary of the Intercollegiate Young Men's Christian Association, 129 Lexington Avenue.

SUGGESTION.

It would be to the advantage of students if they would register a few days in advance of the opening exercises, secure boarding-places, and purchase books, so that their studies may not be interrupted in the beginning. The Clerk is in his office every day after September 1, *from* 10 A.M. *to* 2 P.M.

TEXT-BOOKS.

As a rule, only the latest editions of text-books should be purchased.

Anatomy—Text-Book, Gerrish, $6.50; Reference Works, Morris, $6.00; Gray, $5.60; Quain, $25.20; Haynes, *Guide to Dissection*, $0.80; Treves, *Surgical Applied Anatomy*, $1.60; Haynes, *Manual of Anatomy*, $2.50.

Physiology—Kirke's *Hand-Book of Physiology*, sixteenth edition, Halliburton, 1900, $3.00; Flint, $4.80; Stewart, $3.75; Foster, $3.60; Landois.

Histology—Stohr, *Text-Book of Histology*, $3.00; Schaefer, *Essentials of Histology*, $3.00.

Bacteriology—Sternberg's *Manual of Bacteriology*, $8.00; Muir and Ritchie, *Manual of Bacteriology*, $3.25.

Chemistry—Witthaus, *Manual of Chemistry*, fifth edition, $3.25; Witthaus, *Laboratory Course*, fourth edition, $1.00; Ganot's *Physics*, $4.00.

Medicine—Second year, Lockwood, $2.50; third year, Musser, *Medical Diagnosis*, $6.00; Thompson's *Practical Medicine;* for reference, Loomis-Thompson, *American System of Practical Medicine*, $24.00.

Surgery—Tillman, 3 vols., $15.00; *American Text-Book*, $7.00; Parks, *Surgery*, 2 vols., $9.00; Stimson, *Fractures and Dislocations*, $5.00; Stimson, *Operative Surgery*, $3.00; Dennis, *System of Surgery*, $6.00 per volume; Parks, *Surgery*, 1 vol. ed., $6.00.

Genito-Urinary—White and Martin, $6.00; Hyde and Montgomery, $2.50; Keyes and Chetwood, $2.75.

Obstetrics—Hirst's *Obstetrics*, $5.00; Winckel, $5.00; Dorland, $2.50; Jewett's *System of Obstetrics*, $1.80.

Gynæcology—Penrose, $3.75; Dudley, $5.00; Kelly, $15.00.

Materia Medica and Therapeutics—White, *Materia Medica and Therapeutics*, $3.00; Coleman, *Syllabus of Materia Medica*, $1.00; Hare, *Practical Therapeutics*, $4.00; Thompson, *Practical Dietetics*, $5.00.

Pathology—Delafield and Prudden, *Pathological Anatomy and Histology*, $5.00; Orth, *Pathological Diagnosis* (Trans. of Sydenham Society); Ziegler, *General Pathology*, $5.00.

Dermatology—J. Nevins Hyde, $4.50.

Ophthalmology—Noyes, $5.00; De Schweinitz, $4.00; Swanzy, $3.00; Jackson, $3.50; Suter, $1.50; Nettleship, $3.00.

Otology—Bacon on the Ear, $2.25; Politzer, *Diseases of the Ear*, $7.00; Macewen, *Pyrogenic Infection*, $4.00.

Nervous Diseases—Dana, $3.50; Gower, *Diseases of the Brain and Spinal Cord*, $8.00; Dercum, $6.00; Obersteiner, *Anatomy of the Nervous System*, $5.50.

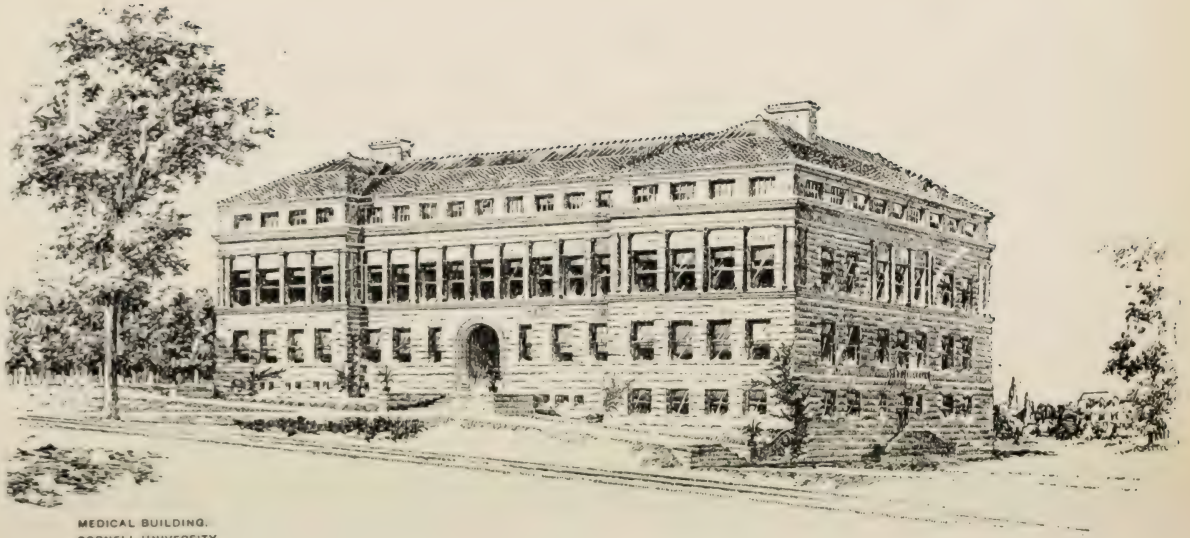
Diseases of Children—*Medical Diseases of Infancy and Childhood*, Williams, $2.50; *An American Text-Book of the Diseases of Children*, Starr, $7.00.

Orthopædic Surgery—Bradford and Lovett, $4.75.

Gould, *Student's Medical Dictionary*, $3.25.

Dissecting Cases—$2.00 to $5.00.

Text-books, etc., may be obtained from the Clerk at the College.



MEDICAL BUILDING.
CORNELL UNIVERSITY.
W. H. MILLER, ARCHT.,
ITHACA, N. Y.

INSTRUCTION AT ITHACA.

During the First Two Years of the Course.

CALENDAR FOR ITHACA.

First Term, 1901-1902.

September 24th, Tuesday.—Academic year begins; matriculation of new students; University scholarship examinations begin.
September 25th, Wednesday.—Matriculation of new students.
September 26th, Thursday.—Registration of matriculated students.
September 27th, Friday.—Instruction begins in all departments of the University at Ithaca. President's annual address to students at 12 M.
December 21st, Saturday.—Christmas recess begins.
January 3d, Friday.—Work resumed.
January 31st, Friday.—First term closes.

Second Term.

February 3d, Monday.—Registration for the second term.
March 28th, Friday.—Easter recess begins.
April 8th, Tuesday.—Work resumed.
June 12th, Thursday.—Instruction ends.
June 19th, Thursday.—Thirty-fourth annual commencement.

General Statement.

Upon the establishment of the Medical Department of Cornell University in 1898, in New York City, by action of the Board of Trustees, it was resolved that the work of the first two years, consisting as it does mainly of fundamental scientific subjects, should also be given in Ithaca, where the admirable facilities offered by the long estab-

lished departments of Comparative Anatomy, Physics, Chemistry, Physiology, Histology, Embryology, and Bacteriology afford unrivalled facilities for thorough study. The remaining subjects of the first two years were also fully provided for.

Among the facilities of the University of special value to the Medical College may be mentioned the museums of Vertebrate and Invertebrate Zoölogy, including Entomology, Comparative Anatomy, of Agriculture, of Botany, and of Geology. The University Library, with its 250,000 bound volumes, 40,000 pamphlets, and 600 current periodicals and transactions, is likewise as freely open to medical students as to other university students.

As so many of the subjects of the first two years in medicine are purely scientific in character, they, according to long-established usage, count toward a degree in Arts; it thus came about that a part of the work of the students in Arts counts in a medical education also, and there naturally arose a combined course in arts and medicine by which the degree of A.B. and of M.D. could be obtained by the best men in six years (for a schedule of this combined course, see pp. 103–105).

Through the generosity of an anonymous giver, the University has been enabled to erect a building especially designed for anatomy, histology, embryology, and physiology. The building is constructed of Ohio sandstone, similar to the library and law school. The general form is that of an E, 160 feet long, with wings 40 feet square.

In the cellar is situated the cold-storage, embalming, and cremating rooms, a large room 40 feet square for aquaria, projection, etc., and store room.

In the basement is a room for the ventilating and cold-storage machinery, a photographic room, a recitation and a large lecture room, besides the lower part of the large amphitheatre.

On the first floor are located the cloak-rooms for men and women, office, library and faculty rooms, museum, two recitation rooms, upper part of the large amphitheatre, and assembly room.

The second floor is devoted to the departments of histology and

physiology, each with a large general laboratory, a research laboratory, preparation rooms and private laboratories for the staff of instruction.

The third floor consists of the general and special dissecting rooms, study room, amphitheatre, besides rooms for the staff.

The attic is utilized for macerating the skeletons and for storage.

The greatest pains have been taken for ventilation. The lighting, as shown by the accompanying picture, is almost perfect in all the rooms.

DEPARTMENTS, METHODS, AND FACILITIES.

ANATOMY.

Abram Tucker Kerr, B.S., M.D., *Assistant Professor.*
Robert Orton Moody, B.S., M.D., *Assistant Demonstrator.*
Lawrence Hendee, M.D., *Assistant Demonstrator.*
Augustus Grote Pohlman, M.D., *Assistant Demonstrator.*

As shown in the following courses, the anatomy is given in the first and second years by recitations, section demonstrations, and dissection. Special stress is laid upon practical work in the laboratory.

During 1901 and 1902, courses 3, 4, and 5 will be given during the first half-year. All the laboratory work will be condensed into the second half-year. This alteration in courses is to give the students the full benefit of the new building, the dissecting rooms of which are to be ready for occupancy at the beginning of the second term, February 3, 1902.

During the first year, second half, thirty-five hours per week are devoted to laboratory work, the class being divided into three groups assigned to head and neck, upper extremity and lower extremity. These starting simultaneously in February, will study the bones of their part before taking up the dissection. Upon the satisfactory completion of one part, the bones and dissection of another part will be taken up in a similar way. Those students completing the three parts in their first year, will be assigned to additional work.

During the second year, second half, thirty hours per week are devoted to laboratory work. The student will be assigned to the dissection of the thoracic and abdominal viscera; upon completing these there will be an opportunity to repeat any of the required work, or to do regional and special dissection, or original work. As the laboratory work in osteology and in dissection advances, the students are called from the laboratory in small groups for demonstrations upon the work which they have completed.

In the first year, a complete skeleton is loaned to each two students. During the two years, the student is required to make at least one complete dissection of the human body. The dissecting material is sufficient, thoroughly embalmed, and is kept in cold storage, so as to be ready for use when needed. The work is personal and practical, each student being independent of the others, so that those with special training or ability are in no way retarded by the slower members of the class. The object of the course is not only to teach the structure, connections, and relations of the parts of the body, but also to train the student in methods of scientific work, observation, and thought. The students are encouraged to make careful notes and drawings, and to record all variations from their text-book descriptions. For this purpose they are furnished with outline record charts.

In addition to the laboratory work, there will be two demonstrations per week to small sections of the class, on Topographical and Regional Anatomy. In these, special dissections will be shown to the students, and their attention called to the practical application of Anatomy to Medicine and Surgery. There will also be two prac-

ticums per week in which the structure, connections, and relations of the thoracic and abdominal viscera will be demonstrated, and two practicums devoted to the cranial nerves, organs of special sense, and other difficult parts. These will also be given to small sections.

Those who have satisfactorily completed the required work, and others properly qualified, will be given opportunity to do advanced and original work.

MICROSCOPY, HISTOLOGY, AND EMBRYOLOGY.

Simon Henry Gage, B.S., *Professor.*
Benjamin Freeman Kingsbury, A.B., Ph.D., *Assistant Professor.*
Mary Jane Ross, A.M., *Assistant.*
Charles Herbert Boxmeyer, A.B., *Assistant.*

As indicated by the following courses, this department offers elementary and advanced instruction in the theory and use of the microscope and its accessories, in photo-micrography, in vertebrate histology and vertebrate embryology; and opportunities for research in all of these subjects.

The material equipment consists of a good supply of modern microscopes, each one of which is fitted with a low and medium power dry objective and a 2 mm. homogeneous immersion objective. Camera lucidas, polariscopes, micro-spectroscopes, photo-micrographic cameras, and other special apparatus are in sufficient numbers to give each student opportunity for personally learning to use them, and for applying them to any special study in which they are called for. The general and research laboratories are large, and are equipped with microtomes, incubators, aquaria, etc. The collection of histologic and embryologic specimens is extensive and constantly increasing. Sets of typical specimens are available for study and comparison by the students.

The aim of the department is to bring the student into direct contact with the truths of nature, and hence, while there are lectures to

give broad and general views, there is a large amount of laboratory work in which the facts are learned at first hand, and the methods and manipulations necessary for acquiring the facts are practised by each student. It is recognized that less ground can be covered in a given time in this way, but it is believed, and experience has confirmed the belief, that the intellectual independence and power to acquire knowledge direct from nature which is gained by this personal work is of far higher value than the facts and theories that might be learned in the same time from books and lectures alone, or from specimens prepared by some other individual.

This lake region with its rich and varied fauna is especially favorable for investigations in the histology and embryology of all the main groups of vertebrates; and the proximity of the abattoirs in the city makes it possible to obtain material for the study of the development of the sheep, cow, and pig. The college clinic and the department of anatomy supply material for the embryology of the cat and dog, so that the opportunities for research upon the development of the domestic animals are excellent. Every encouragement is given for the fullest utilization of these opportunities.

Microscopy.—The first two weeks of the course are given to a study of the theory and manipulation of the modern microscope and its accessories, the underlying principles involved in the preparation, mounting, and study of microscopic objects.

Histology.—This part of the course includes the study of the fine anatomy of man and of the domestic animals, and also the fundamental methods of histologic investigation and demonstration with the microscope.

Embryology.—This deals with the elements of the development of man and of the domestic animals. For ease of demonstrating segmentation, the formation of the germ layers and the organs, the amphibian egg is studied. Then follows a short study of the developing hen's egg to illustrate meroblastic segmentation and to make intelligible some of the phases of mammalian embryology. The main part of the course, however, is devoted to mammalian development.

Gravid uteri are obtained from the abattoirs, and each student has the opportunity to dissect the placenta, fetal membranes, umbilical cord, and the fetus itself, demonstrating among other things the main features of the fetal circulation. For the microscopic study, the department is well supplied with complete series of embryos of the chick, pig, cat, calf, etc., and each student has for study four complete series representing the principal steps in histogenesis and the development of the organs.

NEUROLOGY.

BURT GREEN WILDER, B.S., M.D., *Professor.*

This department is housed in the north wing of McGraw Hall, and has a large museum in the centre of the building. The collection of carefully prepared brains of man, the anthropoids, and of other vertebrates is very large, and serves to illustrate in an admirable manner the morphology of the brain. The lectures given by Professor Wilder fall partly in the field of Physiology and partly in that of Anatomy.

Physiology of the Nervous System.—There are two lectures per week until the Christmas recess; they deal largely with the structure and functions of the nervous system and the sense organs.

Comparative Anatomy and Morphology of the Brain.—Two lectures per week from the Easter recess until the close of the college year. The lectures treat: (*a*) of the comparative anatomy of the brain; (*b*) of the morphology of the human brain; and (*c*) of the cerebral fissures.

Opportunities are also offered by Professor Wilder for research in Neurology and in Comparative Anatomy.

COMPARATIVE PHYSIOLOGY.

PIERRE AUGUSTINE FISH, D.Sc., D.V.M., *Assistant Professor.*
WALTER WELLS HOOVER, *Assistant.*
REUBEN PAUL HIGGINS, *Assistant.*
A. W. BAIRD, A.B., *Assistant.*
O. P. JOHNSTON, A.B., *Assistant.*

The instruction in this department is carried on by means of lectures, recitations, and practical work in the laboratory.

The lectures are illustrated by numerous lantern slides; practical demonstrations form a component part of the exercises wherever possible, and the relationship of physiology to practical medicine is thoroughly emphasized.

In the laboratory a few exercises are devoted to the physiology of the digestive processes and of the blood; the remainder of the work being devoted to the physiology of the nervous, muscular, and circulatory systems. The equipment includes kymographs, sphygmographs, sphygmometers, cardiographs, tambours, centrifuges, microscopes, and other apparatus essential for complete and satisfactory work.

Students are required to take notes, and to hand in their reports accompanied with the tracings and other data obtained from their experiments for inspection and correction.

MATERIA MEDICA.

PIERRE AUGUSTINE FISH, D.Sc., D.V.M., *Assistant Professor.*
WALTER WELLS HOOVER, *Assistant.*
REUBEN PAUL HIGGINS, *Assistant.*
A. W. BAIRD, A.B., *Assistant.*
O. P. JOHNSTON, A.B., *Assistant.*

In this department the work required of medical students consists of a laboratory course only, to serve as an introduction to the lecture

and clinical courses given in New York during the third and fourth years. The student is made familiar in this course with the physical and chemical properties of a selected number of drugs; incompatibilities are demonstrated, and the essentials of prescription-writing explained. A large assortment of crude drugs and many of their various preparations are available for examination.

The work in this course is divided into three parts. One month is devoted to the study of a selected group of inorganic drugs; the second month to the study of certain of the organic drugs and their official preparations; the third month to making pharmaceutical preparations, such as syrups, emulsions, spirits, liniments, tinctures, fluid extracts, extracts, ointments, pills, and others.

In their study, the students are required to write concise notes of the physiological action of the drugs examined. In addition to this each student will have practical experience in writing and compounding prescriptions.

PHYSICS.

Edward Leamington Nichols, B.S., Ph.D., *Professor.*
George Sylvanus Moler, A.B., B.M.E., *Assistant Professor.*
Ernest Merritt, M.E., *Assistant Professor.*
Homer James Hotchkiss, A.M., M.M.E., *Instructor.*
Clayton Halsey Sharp, Ph.D., *Instructor.*

The instruction in physics is by means of lectures throughout the year. In these lectures the general laws of Mechanics and Heat, Electricity and Magnetism, and Sound and Light are presented. The very large collection of lecture-room apparatus possessed by the department makes it possible to give experimental demonstrations of all important phenomena. The arrangements for experimental work are most complete. Ordinary illuminating gas, acetylene, oxygen and hydrogen, compressed air, water and steam, blast and vacuum are within easy reach, and electric currents from alternating and

direct current dynamos and from storage batteries are available. A masonry pier 4 × 12 feet permits the use in the lecture room of delicate apparatus that could otherwise be used only in the laboratory. A small turbine on the lecture table furnishes power for a variety of experiments. Lanterns with lime or electric light are always ready for use when they can in any way aid a demonstration.

The required course (*2a*) in physics for medical students consists of two lectures a week throughout the first year, and the reading of a text-book. Note-books prepared by members of the class are read and graded at frequent intervals. A longer course (*2b*), consisting of two lectures a week, two recitations a week, and one afternoon in the laboratory, is likewise open to medical students, and all those who can find the time to do so, are urged to take this course in place of the required work mentioned above. It should be chosen in preference to the latter by all who wish to prepare themselves for advanced work in the biological sciences. The lectures are the same as in the shorter course, but these are supplemented by thorough drill upon the principles of the science, and this, together with the laboratory practice, affords opportunity for a much more adequate knowledge than can be obtained from any course that consists solely of lectures.

During the second term the department offers a course in practical photography (Physics, 9; 2 hours), consisting of lectures and laboratory practice. This course is open to students of medicine under the conditions stated upon page 143 of the University Register.

CHEMISTRY.

GEORGE CHAPMAN CALDWELL, B.S., Ph.D.,
Professor.

LOUIS MONROE DENNIS, Ph.B., B.S.,
Professor of Inorganic and Analytical Chemistry.

JOHN ELLIS TREVOR, Ph.D.,
Professor of General Chemistry and Physical Chemistry.

WILLIAM RIDGELY ORNDORFF, A.B., Ph.D.,
Assistant Professor of Organic and Physiological Chemistry.

Instructors in Chemistry,

THEODORE WHITTELSEY, A.M., Ph.D.
EMIL MONIN CHAMOT, B.S., Ph.D.
HENRY ROSE JESSEL, B.S., Ph.D.

Assistants in Chemistry,

MORRIS ROGERS EBERSOLE, B.S.
JOHN EDGAR TEEPLE, B.S.
ROBERT FISCHER, B.S.
BENJAMIN BERNARD TURNER, B.S., Ph.D.
ARTHUR RENWICK MIDDLETON, A.B.
GEORGE HEWSON BURROWS, B.S.
ELLIOTT SNELL HALL.

Inorganic Chemistry.—The elements of Inorganic Chemistry are taught by lectures, laboratory work, and recitations from a text-book. Careful attention is given to the writing of chemical equations and to the solution of chemical problems. Experiments illustrating the principles discussed in the text-books are performed in the laboratory by each student.

Qualitative Analysis.—The qualitative analysis begins with the study of those reactions of the elements and their compounds which are used in their reduction. This is followed by the practical application of the knowledge thus gained to the analysis of unknown substances, both in the solid form and in solution.

Urine Analysis—Qualitative and Quantitative.—In this course the most important of the normal and pathological constituents of the urine are determined both qualitatively and quantitatively.

Organic Chemistry, or the Chemistry of the Compounds of Carbon.—In this course the study of the typical compounds of carbon, their properties, reactions, and relations to each

other, is taken up, especial attention being given to those organic compounds which are of physiological importance. The course consists of lectures and recitations, supplemented by frequent written examinations. The lectures are fully illustrated by experiments, specimens of the compounds considered, and charts.

Toxicological Chemistry.—This course is intended to serve as an introduction to the methods employed for the separation and identification of the common poisons.

Physiological Chemistry.—The work in this course comprises the study of the chemistry of the proteids, carbohydrates and fats, and of the compounds found in the animal body which are of physiological and pathological importance. The method of instruction is by lectures, recitations, and laboratory work, with frequent written reviews. In the laboratory the student separates from the various animal fluids and organs the chemical compounds which they contain, studies their properties, reactions, and products of decomposition, and thus familiarizes himself with the methods of isolation and identification of these products.

The above courses in Chemistry are required of all students in medicine. Other advanced courses are open to properly qualified students in medicine, and especial facilities for research work in chemistry are at their disposal.

BACTERIOLOGY.

Veranus Alva Moore, B.S., M.D., *Professor.*
Raymond Clinton Reed, Ph.B., *Instructor.*
Samuel Howard Burnett, A.B., M.S., *Instructor.*
Otto Fred Hunziker, B.S.A., *Assistant.*

The instruction in Bacteriology is given by means of lectures, recitations, and laboratory work. The bacteriological laboratories are well supplied with the best modern apparatus. The student will, under proper supervision, prepare culture media, make cultures, and study the morphology of bacteria in both the fresh (living) condition

and in stained cover-glass preparations. In fact, all of the technique necessary for a practical working knowledge in bacteriology will be carefully covered. The more important species of pathogenic bacteria will be studied. The special methods which are necessary for diagnosing such diseases as tuberculosis, anthrax, glanders, and diphtheria will receive careful attention. Disinfection, sterilization, the means by which pathogenic bacteria are disseminated, protective inoculation, and other kindred subjects will be fully considered.

SURGERY.

LUZERNE COVILLE, B.S., M.D., *Lecturer on Surgery.*

Surgery.—Four hours weekly, during the first half year, lectures and quizzes. The course is given to small sections, and is intended to familiarize the student with the principles of General Surgery and Pathology, and to ground him in the surgical diseases, tumors, and fractures, and the technique of operative asepsis and antisepsis, and operation, dressings, and methods.

MEDICINE.

PAUL RICHARD BROWN, M.D., *Lecturer on Medicine.*

No didactic lectures are delivered, their place being taken by recitations from a standard text-book. Students also take up the subject of normal physical diagnosis in the latter part of the course.

Recitations.—The study of medicine proper is begun with systematic recitations from Lockwood's *Practice of Medicine*, an elementary text-book. In these recitations the nomenclature, etiology, pathology, and symptomatology of typical cases of diseases are considered, the question of treatment not being taken up until the Junior year in New York.

Physical Diagnosis.—Toward the end of the second-year course of Medicine, Normal Physical Diagnosis of the chest is taught in twelve lessons, some abnormal cases being introduced for com-

parison. For the above work, the class will be divided into sections of about ten each.

OBSTETRICS.

PAUL RICHARD BROWN, M.D., *Lecturer on Obstetrics.*

Instruction in obstetrics consists mainly of recitations from a standard text-book, these recitations covering the anatomy of the internal genitalia and pelvis, ovulation, menstruation, signs of pregnancy, the physiology, mechanism, and clinical course of normal labor, and the care of mother and child during the puerperium. Whenever necessary, these recitations will be illustrated by plates, casts, and demonstrations upon the obstetric manikin, etc.

SCHEDULE AND SUMMARIZED STATEMENT.

In this schedule the Counts or University hours are given on the following basis: One recitation or lecture weekly for one term or half-year gives a credit of one; for laboratory work it requires two and one-half actual hours weekly for a term or half a year to secure a credit of one. In the courses of instruction following the schedule, the actual time required of the student at lectures, recitations, and laboratory work is stated.

SCHEDULE.

First Year.

	No. of Course.	*1st Term.*	*2d Term.*
Anatomy	1		14
Inorganic Chemistry	3	4	
Qualitative Chemical Analysis	8	1	1
Urine Analysis	13		2
Experimental Physics	2*a*	2	2
Physiology, Lectures	20	1	1
Physiology, Recitations	20*a*	3	
Microscopy, Histology, and Embryology	1	8	
Physiology of the Nervous System	1	1⅓	

Second Year.

	No. of Course.	*1st Term.*	*2d Term.*
Anatomy	2		10
"	3	1	
"	4	1	
"	5	1	
Neurology	3		1⅓
Physiology	21	1	
" Recitations . . .	21*a*	4	
" Laboratory . . .	22	1⅓	
Organic Chemistry	32	3	
Toxicology	68	1	
Physiological Chemistry . . .	40		2
" " Lab. . .	41		2
Materia Medica	26	⅔	⅔
Bacteriology	43		6
Medicine	9	2	
Surgery	10	4	
Obstetrics	11	2	

Junior Year.—For subjects, see page 73, as given in New York City.

Senior Year.—For subjects, see page 74, as given in New York City.

SUMMARY OF COURSES OF INSTRUCTION.

First Year.

1. Anatomy.—Laboratory work with section practicums and recitations, thirty-five actual hours weekly from February to June. (*a*) Upper extremity, ten hours weekly. (*b*) Lower extremity, ten hours weekly. (*c*) Head and neck, fifteen hours weekly. Course 1 (*a*), (*b*), and (*c*) is required of first-year students in Medicine; (*a*),

(*b*), or (*c*) may be taken separately by the students in Arts electing Medicine. (See the combined course of Arts and Medicine, page 103.) Assistant Professor Kerr, Assistant Demonstrators Hendee, Moody, and Pohlman, and assistants.

1. Microscopy, Histology, and Embryology.—Two lectures, two recitations, and twelve hours of laboratory work weekly for the first half-year. Professor Gage, Assistant Professor Kingsbury, and Assistants Ross and Boxmeyer.

(The work in Microscopy begins September 27 and continues till October 12; the Histology begins October 12 and continues till December 7; the Embryology begins December 7 and continues till January 31.)

1. Physiology of the Nervous System.—Two lectures weekly until the Christmas recess. Professor Wilder.

20. Physiology.—The Digestive Functions, Circulation, Respiration, and Excretion. One lecture each week throughout the year. F. 10. Dr. Fish.

20a. Recitations in Physiology.—Three hours each week. First half-year.

2a. Experimental Physics.—Two lectures, with demonstrations, weekly throughout the year. Professor Nichols and Assistant Professor Merritt.

3. Introductory Inorganic Chemistry.—Two lectures, two recitations, and five hours of laboratory work weekly. First half-year till Christmas recess. Professor Trevor and Dr. Jessel; Dr. Turner, Mr. Burrows, and Mr. Hall.

8. Qualitative Analysis.—One recitation and five hours of laboratory work weekly. Christmas recess until Easter recess. Professor Dennis and Dr. Whittelsey; Messrs. Fischer, Middleton, and Ebersole.

13. Urine Analysis, Qualitative and Quantitative.—One recitation and five hours of laboratory work weekly. Easter recess until end of year. Dr. Whittelsey, and Messrs. Fischer and Ebersole.

SECOND YEAR.

2. Anatomy.—Laboratory work with section practicums and recitations thirty actual hours weekly. February to June. (*a*) Thorax, seven and one-half hours weekly. (*b*) Abdomen, seven and one-half hours weekly. (*c*) Special, ten hours weekly. Assistant Professor Kerr, Assistant Demonstrators Hendee, Moody, and Pohlman. Course 2 (*a*), (*b*), and (*c*) is required of second-year students in Medicine. (*a*), (*b*), or (*c*) may be taken separately by students in Arts electing Medicine.

3. Topographical and Regional Anatomy.—Two section practicums weekly. September to February. Dr. Hendee. (Open to those students in Arts who have had Course 1.)

4. Thoracic and Abdominal Viscera.—Two section practicums weekly. September to February. Dr. Kerr.

5. Cranial Nerves and Organs of Special Sense.—Two section practicums weekly. September to February. Dr. Moody. Courses 3, 4, and 5 are required of second-year students in Medicine.

6. Advanced and Research Work.—Laboratory work eight or more actual hours per week. Assistant Professor Kerr.

3. Neurology.—Two lectures weekly after Easter recess. Professor Wilder.

4, 5, and 6. Advanced and Research Work in Microscopy, Histology, Embryology, and Cytology.—Laboratory work, eight or more hours per week, with seminary. Professor Gage and Dr. Kingsbury.

21. Physiology.—The Functions of the Muscular and Nervous Systems and the Sense Organs. One lecture each week, first half of year. Dr. Fish.

21a. Recitations in Physiology.—Four hours each week. First half-year. Assistants Hoover, Higgins.

22. Physiological Laboratory. — Five hours each week. First term until Christmas recess. Dr. Fish. Assistants Hoover, Higgins.

24. Research and Advanced Work in Physiology.—(See University Register.)

32. Elementary Organic Chemistry.—Two lectures and one recitation weekly. First half-year. Assistant Professor Orndorff and Mr. Teeple.

40. Physiological Chemistry.—Two lectures or recitations weekly. Second half-year. Assistant Professor Orndorff and Mr. Teeple.

41. Physiological Chemistry.—Five hours laboratory work weekly. Second half-year. Assistant Professor Orndorff and Mr. Teeple.

68. Toxicological Chemistry.—Two and one half hours laboratory work weekly. First half-year. Dr. Chamot.

Special facilities are provided by the Chemical Department for *advanced and research* work in chemistry. For a description of these courses see the University Register, page 145.

26. Materia Medica and Pharmacy, Laboratory.—Five hours each week. Christmas recess until Easter recess. Dr. Fish. Assistants Hoover, Higgins.

28. Advanced and Research Work in Materia Medica.—(See University Register.)

43. Bacteriology.—This course is open to students who have had or are taking Course 1 in Microscopy. Two lectures and ten hours laboratory work each week. Professor Moore; Instructor Reed and Mr. Burnett.

44. Research in Bacteriology.—Laboratory work with lectures and seminary throughout the year. Professor Moore and Instructor Reed. The course is designed for those wishing to undertake original investigation in Bacteriology preparatory to practical work in bacteriological lines, such as exists in health department laboratories. This course is open to students who have taken Course

43 or its equivalent in some other university. Elementary chemistry and a reading knowledge of French and German are indispensable for successful work in this course.

9. Medicine.—Two recitations weekly. First half-year. Dr. Paul R. Brown.

10. Surgery.—Two lectures and two recitations weekly. First half-year. Dr. Coville.

11. Obstetrics.—Two recitations weekly. First half-year. Dr. Paul R. Brown.

SIX-YEAR COURSE FOR THE DEGREE IN ARTS (A.B.), AND IN MEDICINE (M.D.).

There is presented below a definite schedule of studies which are required for the first two years in medicine. Although a definite schedule of the Arts and Science studies which do not count in the medical course is not given, it is recommended that a thoroughly good reading knowledge of French and German be acquired, and that students be advised to offer advanced mathematics for entrance, so that the longer course in physics may be taken. This is because in the longer course laboratory work forms an integral part. Finally, it is believed that it would be of great advantage for students to have taken, as a part of their preparatory work, some Latin and Greek. For example, the amount of Latin represented by a course requiring from three to five hours per week for one year, and the amount of Greek in Goodell's *Greek in English*.

For the elective Arts and Science work it seems very desirable that, besides the French and German mentioned, the student should take advantage of the courses in literature, history, and philosophy, as well as the scientific courses represented by the departments of geology, botany and zoölogy, physics, chemistry and mathematics.

OUTLINE OF THE WORK OF THE FIRST FOUR YEARS FOR STUDENTS WORKING FOR A DEGREE IN ARTS AND SCIENCES (A.B.), AND A DEGREE IN MEDICINE (M.D.).

The fifth and sixth years are given wholly to professional studies, at the division of the college in New York City.

If a student wishes to obtain both degrees in six (6) years he must pass 87⅔ university hours counting toward medicine during the first four years. In order to do this, and not exceed the eighteen hours limit of the Department of the Arts and Sciences, he must begin the work counting toward medicine during the first year.

The following schedule of studies counting toward medicine is recommended:

STUDIES COUNTING TOWARD MEDICINE.			STUDIES NOT COUNTING TOWARD MEDICINE.	
First Year.			*First Year.*	
Inorganic Chemistry	8		Language, Literature, History, Science, Mathematics	24
Physics (2a)	4	—12		
Second Year.			*Second Year.*	
Organic and Physiologic Chemistry, Toxicology	8		Language, Philosophy, History, etc.	20
Histology and Embryology	8	—16		
Third Year.			*Third Year.*	
Anatomy	14		Literature, Philosophy, Science, etc.	8⅔
Physiology	6			
Bacteriology	6			
Materia Medica	1⅓	—27⅓		
Fourth Year.			*Fourth Year.*	
Anatomy	17		Languages, Science, etc.	3⅓
Physiology	7⅓			
Medicine	2			
Surgery	4			
Obstetrics	2	—32⅓		
Total hours to count toward medicine		87⅔	Total hours not counting toward medicine	56⅓

It will be noticed that the first two years are largely independent of medical subjects. No purely professional subject appears until the third year.

While the above schedule presents the arrangement of subjects for a course to be completed in six years, a seven- or an eight-year course for the two degrees presents many advantages.

REQUIREMENTS FOR ADMISSION.

For admission to the Ithaca division of the Cornell University Medical College, a medical-student certificate issued by the Regents is required. (For details, see pages 23–25.) No student is admitted except at the beginning of the college year in September.

RESIDENCE AND REGISTRATION.

The college year is nine months long, extending from the last of September till about the middle of June, and is divided into two nearly equal terms. (For exact dates, see calendar on page 85.)

Residence in Ithaca is required of all students. For leave of absence during the session, application should be made to the Secretary, Dr. Kerr.

At the beginning of each term (September 24–25, 1901, and February 3, 1902) students must register with the University Registrar, Room 9A, Morrill Hall. After registration with the University Registrar, they must register with the Secretary of the Medical Faculty, Dr. Kerr, Room 8, White Hall, south entrance, 4th floor.

SCHOLARSHIPS. (See page 33.)

EXAMINATIONS.

Students are advanced in course from one year to the next upon passing examinations upon the work of that year. As in the academic

department, the work of each year is considered final of itself. There is no unnecessary repetition of subjects taught from year to year. According to the usage of the other departments, the university student found to be markedly deficient will be dropped from the college.

ADVANCEMENT FROM SECOND TO THIRD YEAR.

Upon the completion of the two years in Ithaca, the student must obtain from the Faculty a statement of all the work which he has done; and accompanying this statement must be a recommendation that he be allowed to register in the New York division. As a student is not advanced from one year to another in the New York division until all the work of the year is completed, a student from Ithaca cannot enter the third-year class in New York until the entire schedule of the first two years has been successfully completed. For removing any conditions, examinations are held at the beginning of the fall term, both in Ithaca and in New York City. The student is at liberty to take these examinations in Ithaca or in New York City. The examination on a subject in either place is final for that year. That is, the student will not be permitted to try an examination on a subject in Ithaca, and take advantage of the later date for the examination in New York to have a second examination on the same subject in the same autumn.

If a student is deficient in two or more subjects there is no objection to his taking the examination in one or more subjects in Ithaca, and the remaining ones in New York, the same autumn.

MEDICAL SOCIETY.

The Cornell Medical Society is a student organization. Meetings are held on Wednesday evenings of alternate weeks. At these, papers prepared by the members are read, followed by general discussion. The aim is to give mutual aid in gaining general and special med-

ical knowledge, facility in conducting the exercises of the meetings, and in presenting papers and discussions in a clear and forcible manner before an audience.

TUITION AND LABORATORY FEES.

Tuition each year $150
Laboratory Fees to cover cost of material.

BOARD AND ROOMS.

The cost of living in Ithaca, including board, room, fuel, and lights, varies from $4 to $10 per week. By the formation of clubs, students are sometimes able to reduce their expenses to $3.50 per week for room and board, and occasionally to even less than that amount.

The cost for board, rent of furnished room, fuel and lights, in Sage College and Sage College Cottage, which are exclusively for women, varies from $5 to $6.50 a week. A student occupying alone one of the best rooms pays $6.50 a week. If two occupy such a room together, the price is $5.75. Those occupying less desirable rooms, with two in a room, pay $5 a week each. Both buildings are warmed by steam, lighted by electricity, and, in most cases, the sleeping apartment is separated from the study.

Letters of inquiry in regard to board and rooms at the Sage College and the Cottage should be addressed to Mr. G. F. Foote, Business Manager of Sage College, Ithaca, N. Y.

MATRICULANTS IN NEW YORK.

Abbott, Wilson Ruffin.....New York City.
Adler, David.....New York City.
Albones, Arthur William.....Frankfort, N. Y.
Amster, Julius Louis.....New York City.
Aranow, Harry.....New York City.
Armstrong, Edgar B.....Paterson, N. J.
Asserson, Mary Alice.....Brooklyn, N. Y.
Atwater, Henry Harrison, Jr.....Brooklyn, N. Y.
Aykrod, Anna.....Kingston, Ont.
Backus, Harold Simeon.....Andover, Conn.
Baldwin, Janette.....Bethel, Conn.
Baldwin, Wesley Manning.....Brooklyn, N. Y.
Banker, Ernest Ensign.....Ft. Edward, N. Y.
Barringer, Benjamin Stockwell, B.S.....New York City.
Bassin, John Nicholas.....New York City.
Beck, Ehrich Carl.....New York City.
Becker, Henry Clinton, Jr.....Clinton, Mass.
Behring, Joshua Aaron.....New York City.
Benedict, Albert Newell.....Yonkers, N. Y.
Bernfeld, Samuel Joachim.....New York City.
Bernstein, Abraham.....Binghamton, N. Y.
Boettiger, Carl.....Long Island City, N. Y.
Bowen, Willis Elliot, Ph.G.....Churchville, N. Y.
Bradford, Stella Stevens B.....Montclair, N. J.
Brecht, Frederick William, Ph.G.....Brooklyn, N. Y.
Brewster, Margaret Powell.....New York City.
Brodman, Henry.....New York City.
Brown, Christopher William.....Brooklyn, N. Y.
Bunnimowitz, Ellis.....New York City.

Burns, Geoffrey Chas. Henry.....City Island, N. Y.
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Cameron, Irving Gourmotte.....Brooklyn, N. Y.
Canfield, Amos.....Van Etten, N. Y.
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Carr, Hugh Holmes.....New York City
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Castle, Sarph Allen, M.D .....Enfora, Miss.
Ceasar, Abraham Louis.....New York City
Chasina, Charles Louis.....New York City
Cifaldi, Alexis.....New York City
Cimillo, William Anthony.....New York City
Climenko, Hyman ..... New York City
Cohen, Herman.....New York City
Cohn, Julius.....New York City
Costigan, Leo Hubert.....New York City
de Koven, Bernard.....New York City
Dolan, Paul .....Brooklyn, N. Y.
Dosh, Louis Philippe.....New York City
Druskin, Samuel Jerome, B.S.....New York City
Dunning, Emily, B.S .. ..New York City
Dutari, Aurelio Arturo, A.B.....New York City
Dyer, Frank Merrit.....Binghamton, N. Y.
Eaton, Alvin Richard, Jr.....Elizabeth, N. J.
Edinburgh, Simon Henry.....New York City
Edlich, Theodore Julius, Ph.G.....New York City
Ehlers, Edmund Armenius.....New York City
Ehrlich, Simon.....New York City
Ellis, Alfred Lander, B.S.....Hartford, Conn.
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Epstein, Sigmund.....New York City
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Farrell, Benjamin Peater .....Pittsfield, Mass.

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Feldman, Samuel ..... New York City
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Fine, Abraham ..... New York City
Finley, Caroline Sandford ..... New York City
Fish, Joseph ..... New York City
Fisher, Archie Max ..... Spencer, N. Y.
Fisher, Carl DeWitt, Ph.B. ..... New York City
Fleming, Mark L. ..... Summit, N. J.
Flynn, Frederick Laurence ..... New York City
Foster, DeWitt Parshall ..... Lyons, N. Y.
Frank, Samuel ..... New York City
Freedman, Louis ..... New York City
Geddes, Susan Baker ..... Newark, N. J.
Gettinger, Joseph Hermann ..... New York City
Geuser, Gerhard William ..... Brooklyn, N. Y.
Giamarrino, Henry James ..... New York City
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Goldfarb, Samuel Joseph ..... New York City
Goldstein, Isidor ..... New York City
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Green, Arthur Randolph ..... New York City
Greene, James Sonnet ..... New York City
Greenfield, Samuel ..... New York City
Gregory, Alice ..... New York City
Grossman, William, A.B. ..... New York City
Gundacker, Henry John, A.B. ..... New York City
Hamill, John Dulap ..... New York City
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Hayden, John Aloysius ..... Brooklyn, N. Y.
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Hildreth, Edward Raymond, A.B. ..... Bridgehampton, N. Y.
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Hirsch, Henry ..... New York City
Hitchcock, Ethel Olivia Hunter ..... New York City
Hoefling, Gustav Christopher ..... New York City
Hoerle, Horace Poinier ..... Ridgewood, N. J.
Holt, Corliss Mason ..... Fishkill-on-the-Hudson, N. Y.
Horowicz, Alfred Joseph ..... New York City
Horowicz, Bruno ..... New York City
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Kilbane, Edward Francis ..... New York City
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Koehler, Leopold Jacob ..... New York City
Kommel, Louis Moses ..... New York City
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Levine, Morris ..... New York City

Levitas, George Max.....New York City
Levy, Abraham Aaron.....New York City
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Lipschitz, Julius Philip.....New York City
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Ziporkes, William Jerome ..... New York City
Zipser, Benjamin ..... New York City
Zucker, Morris, Ph.G ..... New York City

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Barlow, Hiram Woods ..... Pasadena, Cal.
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Cohen, Rose, M.E., B.E.....New York City
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Coryell, Clarence Catlin.....Ithaca, N. Y.
Cottis, George Wilbert.....Bergen, N. Y.
Cuddeback, Edgar Gorden.....Port Jervis, N. Y.
Cuniffe, Edward Rutherford.....Port Jervis, N. Y.
Demarest, Ruth.....Nyack, N. Y.
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Dirocco, Joseph.....New York City
Donk, Rose Rudolph.....Newark, N. Y.
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Fish, Emmet Grant.....Mecklenburg, N. Y.
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Gould, Clark Summer.....Walton, N. Y.
Grant, Joseph Roa.....Groton, N. Y.

Hall, John Meade ..... Norwich, N. Y.
Hansen, Anthony Hans ..... Norwich, N. Y.
Harris, George Howard ..... Caldwell, N. J.
Hastings, Gertrude Wentworth ..... Meadville, Pa.
Hayden, Paul Lester ..... Sayre, Pa.
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Peck, Ellen Newell ..... Ithaca, N. Y.

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Quigley, James Knight.....Trumansburg, N. Y.
Reu, Leonard .....Buffalo, N. Y.
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Ross, Mary Jane, A.B., A.M.....Waverley, N. Y.
Sanford, Merton Jarvis.....Center Lisle, N. Y.
Santee, Harold Elmore..... Hornellsville, N. Y.
Scharfman, Pauline.....Brooklyn, N. Y.
Seaman, Benjamin Franklin..... .....Matteawan, N. Y.
Searing, Benjamin Haff.....Brooklyn, N. Y.
Smith, Percy Allen Winans.....Medina, N. Y.
Stanley, Lillian Armstrong.....Lenox, Mass.
Steiner, Sidney.....Brooklyn, N. Y.
Storck, Edward Hugo.....Buffalo, N. Y.
Thompson, Carrie Wilbur.....Highland Falls, N. Y.
Todd, Leona Estella.....Rochester, N. Y.
Turnbull, Raymond Alexander..... .....Elmira, N. Y.
Wanzer, Esther Mae.....Ithaca, N. Y.
Weber, Edward William.....Mt. Vernon, N. Y.
Webster, Charles Henry.....West Laurens, N. Y.
White, Zella Mildred..... ....Bradford, Pa.
Windecker, Frederick C.....Little Falls, N. Y.
Wright, Floyd Robins, A.B..... .....Ithaca, N. Y.

COLLEGE BUILDING.*

The Medical School and a Dispensary, each with a main entrance on First Avenue, are arranged as follows :

The basement is commodious, well lighted and ventilated, and contains the engines, boilers, dynamos, and ventilating machinery ; the refrigerating and cold-storage plant, with the injecting and freezing rooms ; a large room with lockers, and another for bicycles. Storerooms, including one for drugs ; four rooms, including a small theatre and a workshop, for orthopædic surgery ; toilet rooms and lavatories, and several rooms for the janitor of the building, are also found here. On the basement level, but outside of the building, is a large incinerating furnace for consuming all the refuse from the College.

The principal entrances to the building are on the *First Floor*. They open from First Avenue into vestibules, one leading to the main hall of the School, the other to the general waiting-room of the Dispensary, between which the large Amphitheatre is situated.

The rooms of the Children's Department, which include an isolating room and a small theatre, are placed between the entrances, while around the waiting-room of the Dispensary are located the office for distributing patients, the Pharmacy, rooms for the departments of Surgery and Medicine, waiting- and dressing-rooms, lavatories, and rooms for the Roentgen-ray and sterilizing apparatus.

Grouped around the main hall of the School on this floor are the Council and Faculty room, the office of the Dean, the Secretary, and the Clerk, a reading and recitation rooms.

Upon the *Second Floor*, the same general arrangement prevails. On the side of the Dispensary there is a large waiting-room, surrounded by rooms assigned respectively to the departments of Genito-Urinary diseases, diseases of the Nervous System, of the Skin and of the Ear, while covering the space at the middle front of the building are the rooms belonging to the departments of the Eye and the Throat, with a series of twenty dark stalls for the simultaneous examination of as many patients by as many students. Small waiting- and dressing-rooms and lavatories for the convenience of the patients are also found on this floor. The upper part of the large Amphitheatre, extending from the floor below, occupies the centre of the rear half of this floor. The remainder of the floor is given up to the School. Here is found a hall, around which are

* See frontispiece and floor plans.

grouped recitation rooms and laboratories for Clinical Pathology. These laboratories have convenient access from the Dispensary, permitting ready coöperation in the work carried on there.

The *Third Floor* of the building is given up to teaching space, excepting an area upon the " Dispensary side " of the building, which is assigned to the departments of Gynæcology and Obstetrics. This comprises a small theatre, examining, waiting, dressing, and toilet room, manikin, and two recitation rooms. The remainder of this floor is occupied by two amphitheatres (each having a seating capacity of about 175 students); one for Anatomy, Physiology, and Pathology, the other for Chemistry ; attached to each are Preparation and Research rooms. The Chemical Laboratories also occupy this floor, including the main Laboratory, the Laboratory for Physiological Chemistry, rooms for apparatus, etc., and a Library of Chemistry.

There is the usual hall and corridor space with toilet rooms and lavatories.

The *Fourth Floor* is occupied by the upper part of the two Amphitheatres which project from the floor below. The Department of Pathology and Bacteriology occupies the remainder of this floor. Ample facilities are provided, not only for the class work and demonstrations, but for special and advanced courses and investigations. A Library of Pathology and Bacteriology is situated here.

The *Fifth Floor* is devoted to the Department of Practical Anatomy. The main dissecting room occupies a space of 160 by 55 feet ; there is also a large room, 40 by 50 feet, which is set apart for advanced undergraduates and post-graduates. These rooms can be cooled by the refrigerating plant in such a manner as to permit the pursuit of Practical Anatomy with as much comfort in summer as in winter.

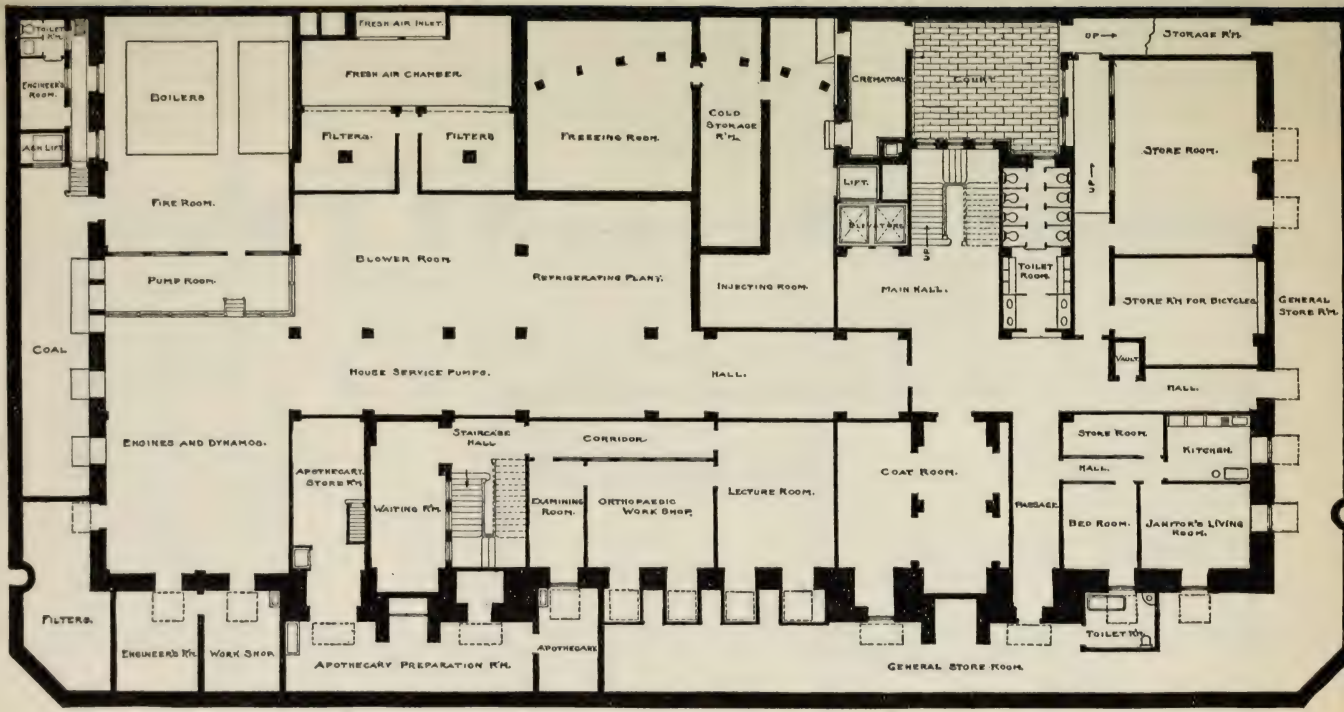
This floor presents such facilities as lockers for 300 students, a small Demonstration Theatre with prosecting and cold-storage room attached, private Dissecting rooms, a Bone room, a Library, a Reading and Study room, and a commodious room for instruction in Operative Surgery.

The Department of Photography, the animal house, and a room for the preparation of bones are placed in a half-story at the top and rear of the building.

There are two main staircases, one for each department of the building, passenger elevators, and a freight lift.

The building itself is fireproof throughout, being constructed of steel, stone, brick, marble, and tile. The glazed brick and glazed tile walls, tile floors, and enamel painted cast-iron trim to the doors and interior of the windows ensure cleanliness. Special attention has also been paid to the problems of refrigeration, lighting, heating, and ventilation, so that every part of the structure can be easily kept at all times in an agreeable and sanitary condition.

In conjunction with this building the Loomis Laboratory will be employed in the manner set forth below.

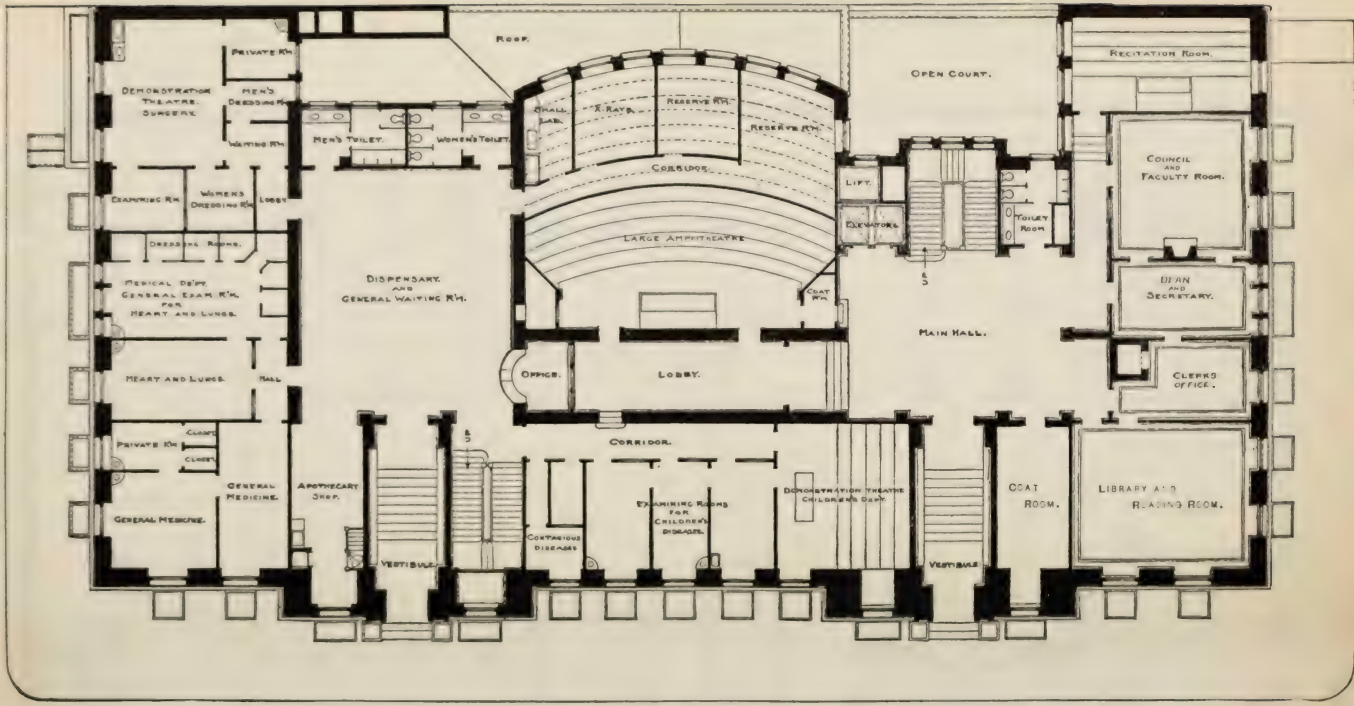


CORNELL UNIVERSITY MEDICAL COLLEGE

PLAN OF BASEMENT.

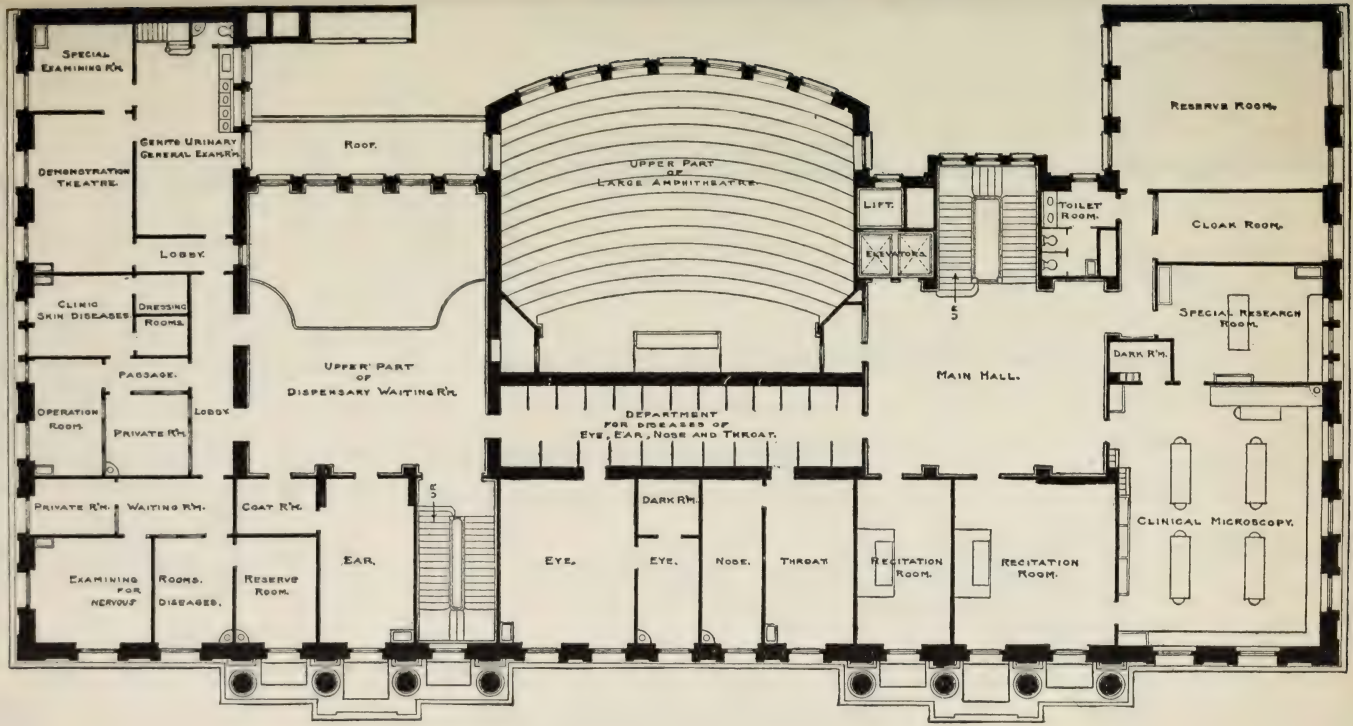
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McKIM, MEAD AND WHITE, ARCHITECTS.

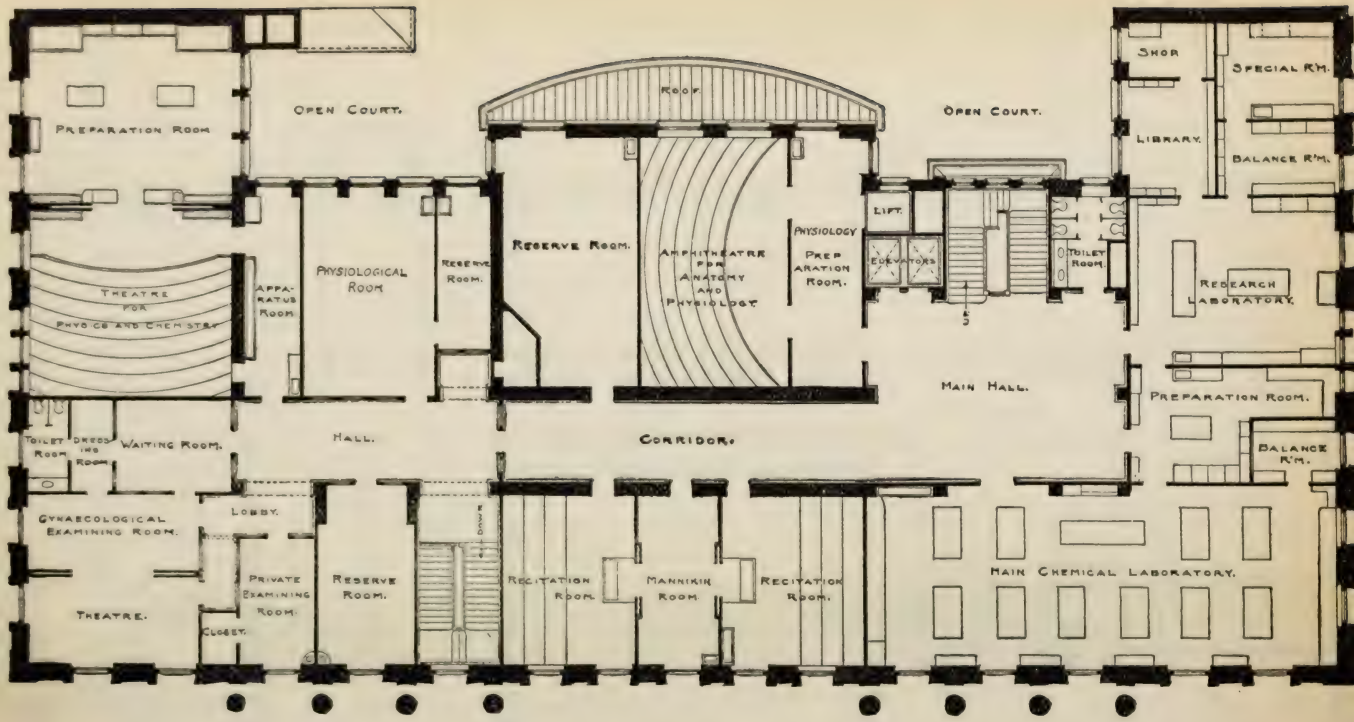


FIRST AVENUE.

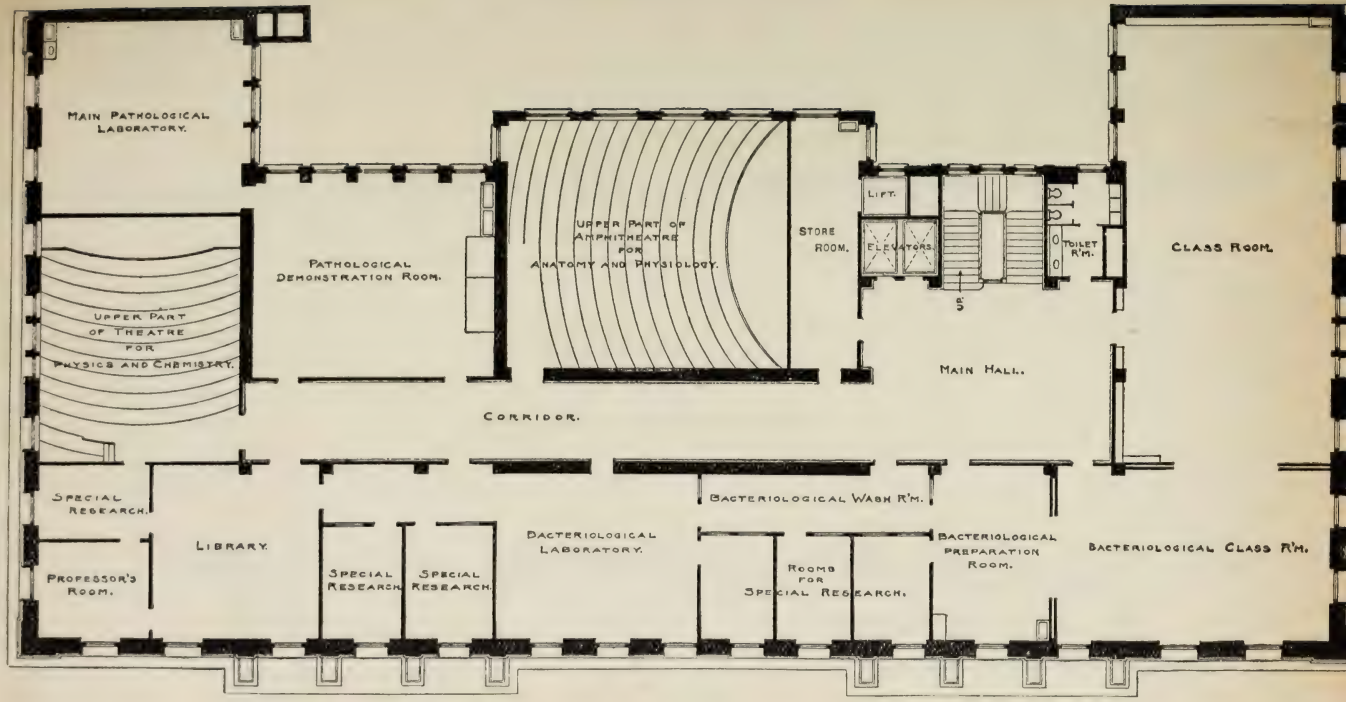
PLAN OF FIRST FLOOR



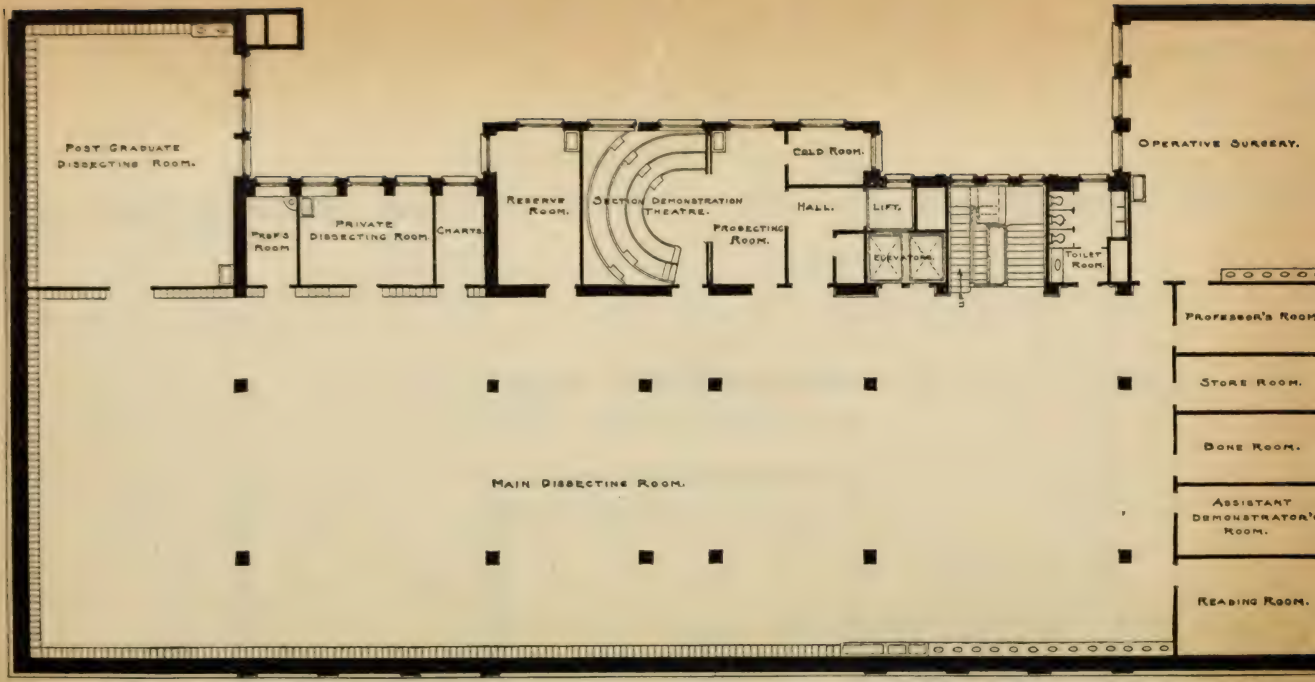
PLAN OF SECOND FLOOR.



PLAN OF THIRD FLOOR.



PLAN OF FOURTH FLOOR.



PLAN OF FIFTH FLOOR.

CORNELL UNIVERSITY

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The COLLEGE OF LAW (Degree LL. B.)

The MEDICAL COLLEGE* (Degree M. D.)

The NEW YORK STATE VETERINARY COLLEGE (Degree D. V. M.)

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The COLLEGE OF ARCHITECTURE (Degree B. Arch.)

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*The full four-year course of the CORNELL UNIVERSITY MEDICAL COLLEGE is given in the City of New York, but the first half of it—the work of the first and second years—is also given at Ithaca, where it may be taken by men students and where alone it can be taken by women students (for whom a home is provided in the Sage College for Women). Both men and women students must take the last two years of the course in New York City. Special announcements of the Medical College and information of every kind regarding it will be furnished on application to

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CORNELL UNIVERSITY MEDICAL COLLEGE

IN NEW YORK CITY

ANNOUNCEMENT

1902–1903

NEW YORK CITY
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CORNELL UNIVERSITY
MEDICAL COLLEGE

IN NEW YORK CITY

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CALENDAR.

1902-1903.

October 1, Wednesday—College opens.
November 4, Tuesday—Election Day. Legal holiday.
November 27, Thursday, to 9 A.M., December 1, Monday—Thanksgiving recess.
December 23, Tuesday, to 9 A.M., Monday, January 5, 1903—Christmas recess.

1903.

February 23, Monday—Legal holiday.
April 10, Good Friday.
May 4, Monday—Examinations for undergraduates begin.
May 18, Monday—Final examinations for graduation begin.
June 3, Wednesday—Commencement.

For Calendar of Instruction in Ithaca, see page 99.

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Assistant in Chemistry.

JAY EMERY ROOT, A.B.,
Assistant in Chemistry.

WILLIAM CHAUNCEY GEER, A.B.,
Assistant in Chemistry.

ARTHUR GORDON RUGGLES, B.S.A.,
Assistant in Bacteriology.

ROY EDWARD FOWLER, B.S.,
Assistant in Chemistry.

BERT RAYMOND WILBUR,
Assistant in Comparative Physiology and Materia Medica.

ABRAM T. KERR, M.D.,
Secretary of the Faculty at Ithaca.



THE LOOMIS LABORATORY

GENERAL STATEMENT.

The Medical Department of Cornell University was established in 1898. This undertaking, which had been contemplated by the Trustees for several years, was made possible by the gift to the University of a commodious and fully equipped building designed for medical instruction, and by the bestowal of a sufficient "Endowment Fund" for the generous maintenance of a large and vigorous school for higher education in medicine.

The Main College Building comprises a Medical School and Dispensary, with principal entrance on First Avenue, opposite Bellevue Hospital, and occupies the entire block between Twenty-seventh and Twenty-eighth Streets on First Avenue, extending back 100 feet, thus affording an available space of nearly 20,000 feet on each floor. The building is designed in a severe style of Renaissance architecture, and is constructed of Indiana limestone and red brick. See page 134.

The Loomis Laboratory (founded 1886) serves the purpose of undergraduate instruction, in connection with the laboratories in the College building, in such subjects as can best be taught in a laboratory, and it is also especially available to graduates in medicine who may desire to pursue further study or original research in the various departments of laboratory investigation.

The Metropolitan Street Railroad cars on Twenty-eighth and Twenty-ninth Streets and First Avenue connect with all the other lines of the company, by a system of transfers at Fourteenth, Twenty-third, Thirty-fourth, and Fifty-ninth Streets, and so put all the hospitals in the city within easy access of the College. A con-

venient station of the Manhattan Elevated Railroad is also at Twenty-eighth Street and Third Avenue.

Clinical Facilities.—The Medical Department of Cornell University has been established in New York in order to secure those advantages for clinical instruction which are to be found only in large cities.

The College Dispensary.—In the portion of the College Building allotted to the Dispensary ample provision has been made for the accommodation of the various clinical departments, of which there are eleven, viz.: General Surgery, General Medicine, including the diseases of the Heart and Lungs, Gynæcology and Obstetrics, Diseases of Children, of the Nervous System, of the Genito-Urinary System, of the Skin, Eye, Ear, Nose and Throat, and Orthopædic Surgery.

Each Department has been furnished with all the instruments and apparatus necessary for the examination and treatment of patients. A number of small amphitheatres are placed in the Dispensary, so that the clinical instruction provided by the curriculum can be carried on without interfering with the treatment of patients.

The attendance in the Dispensary averages 300 patients daily, and is steadily increasing, so that the clinical material is abundant and accessible.

Members of the Faculty of Cornell Medical College hold appointments in the hospitals and dispensaries of the city, and are enabled to utilize for teaching purposes the large quantity and variety of clinical material of ten of the great City Hospitals, viz.:

Bellevue Hospital—Twenty-sixth Street and East River.

This hospital has 900 beds, and receives 24,000 patients annually. In this building is an amphitheatre capable of seating 300 students, and also a number of small, newly built operating theatres, where section demonstrations in surgery and gynæcology are made before the class. Connected with the hospital is a hydropathic establishment where students are shown the practical applications of baths, douches, massage, etc.

The following clinics are held during the session:

Obstetrics and Gynæcology — Monday, 2 P.M.
Professor POLK.

Medicine — Tuesday and Friday, 3 P.M.
Professors LOOMIS and THOMPSON.

Surgery — Wednesday and Thursday, 3 P.M.
Professors STIMSON, WOOLSEY, DENNIS, and GWYER.

Genito-Urinary — Wednesday, 3 P.M., for half the term.
Professor ALEXANDER.

Nervous Diseases — Friday, 4 P.M.
Professor DANA.

The Out-Patient Department of Bellevue Hospital treats over 50,000 patients annually. A large proportion of this clinical material is utilized for the purpose of section teaching by members of the Faculty who hold positions in the Dispensary.

City Hospital (formerly Charity Hospital) — Blackwell's Island, East River. To reach this institution the steamer should be taken at the foot of East Twenty-sixth Street.

This hospital has a capacity of 1,000 beds. It offers special advantages for the study of venereal and genito-urinary diseases.

New York Hospital — Fifteenth Street, between Fifth and Sixth Avenues.

This is one of the most thoroughly equipped hospitals in the city, and has connected with it a large Out-Patient Department.

Clinical instruction is given by Professors Stimson, Loomis, Murray, Bolton, and Johnson.

Presbyterian Hospital—Madison Avenue and Seventieth Street.

This is a large general hospital of 350 beds, and includes extensive and varied medical and surgical service. Clinical instruction is given by Professors Thompson and Woolsey.

Willard Parker and Reception Hospitals—Foot of East Sixteenth Street.

These hospitals are in charge of the Board of Health, New York City, and offer unrivalled opportunities for the study of contagious diseases—such as diphtheria, scarlet fever, measles, smallpox, and typhus fever. They contain 200 beds.

Professor Winters gives bedside instruction to small sections of the fourth-year class in the former hospital.

New York Skin and Cancer Hospital — Nineteenth Street and Second Avenue.

This hospital affords accommodation for the treatment of a large number of patients afflicted with cancer and skin diseases. Section instruction in dermatology is conducted here by Professor Elliot and assistants.

St. Francis' Hospital — 609 Fifth Street.

A general hospital with a capacity of 230 beds. Section instruction here is under the charge of Professor Kammerer.

St. Vincent's Hospital — 195 West Eleventh Street.

This is a general hospital containing nearly 200 beds.

Section teaching and clinics are given here by Professor Dennis and Dr. Aspell.

New York Eye and Ear Infirmary — Second Avenue, corner Thirteenth Street.

This hospital is devoted to the treatment of eye, ear, and throat diseases.

Clinical instruction is given in this institution by Professors Bull and Bacon, aided by a corps of assistants.

Manhattan Eye and Ear Hospital—103 Park Avenue.

This is one of the largest institutions for the treatment of this class of diseases in the city. Professor Knight and his assistants give instruction here in laryngology.

In addition to these hospitals, the teaching corps of the Medical Faculty is represented upon the visiting staffs of many other hospitals and dispensaries in the city, where Cornell students are invited to attend clinics. Among these are: The Maternity Hospital,

Gouverneur Hospital, Harlem Hospital, Almshouse and Workhouse Hospital, Emergency Hospital, Randall's Island Hospital, Columbus Hospital, German Hospital.

REQUIREMENTS FOR ADMISSION.

The laws of New York State require of the prospective student of medicine a preliminary education equivalent to that obtainable in a four years' course in any of the public high schools recognized by the Regents as maintaining a satisfactory standard, before the applicant can be admitted to any class in any medical college in the State. A list of the subjects ordinarily taught in these schools is given in a handbook published by the Regents, and mailed on application to the "Regents' Office, Examination Department, Albany, New York." In this it will be found that each subject, according to its character and the time usually devoted to it, is assigned one or more "counts," 48 of which are needed to obtain the medical-student certificate. This official approval of the preliminary education may be granted by the Regents on presentation to them of properly attested evidence that the requisite work has been accomplished in some institution known to them. In lieu of this the applicant is required to pass the examinations conducted by the State authorities at regular intervals throughout the year. If the certificate is obtained without examinations, it is granted on "equivalents."

Hitherto the Medical Department of Cornell University has been open to all who held the ordinary 48 count certificate. As this can be obtained with little or no knowledge of the English language, and of subjects which are absolutely essential to a proper understanding of any natural science, the Faculty has decided that beginning with the class entering in October, 1902, all applicants for admission must earn their medical-student certificate in part upon the following subjects, as described in the

Regents' "Handbook No. 3, High School Department, Examinations":

Algebra	4 counts
Plane Geometry	4 "
Elementary United States History and Civics	2 "
Second-Year English, or its equivalent	8 "
Second-Year Latin, or the first four books of Cæsar's "Commentaries," or First-Year Latin and First-Year German, French, or Spanish	8 "
	26 counts

The subject-matter covered in these requirements, which must be included in the Regents' certificate, is briefly summarized as follows:

Algebra includes the elements of the subject through quadratic equations.

Plane Geometry includes the geometry of the plane, the ordinary definitions, and demonstrations of simple original theorems.

Elementary United States History and Civics includes important historical dates, the character and purpose of the different wars, the purport of the Constitution, and the relation of the Federal and State governments.

Second-Year English comprises (1) composition, including the theory of construction in prose; (2) terms of style, figures of speech, and prosody; (3) literature, *i.e.*, a knowledge of "Twice-Told Tales," "Sir Roger de Coverley" papers, "Sesame and Lilies," "Ancient Mariner," "Cotter's Saturday Night," "Vision of Sir Launfal," "Silas Marner," "Julius Cæsar," "First Bunker Hill Oration."

Second-Year Latin includes a knowledge of grammar and the ability to translate at sight simple passages from any standard author, or from the first four books of Cæsar's "Commentaries." The alternative to Second-Year Latin, namely, First-Year Latin with First-Year German, French, or Spanish, comprises under the

heading First-Year Latin a knowledge of grammar, the rendering of simple prose from Latin into English, and *vice versa*. Under the heading of First-Year German, French, or Spanish, a similar knowledge is required.

The total number of counts allowed by the Regents for these required subjects aggregate 26. The Faculty recommends that the remaining 22 counts necessary to complete the certificate be made up from the following subject-groups enumerated in the Handbook: Science; Mathematics; Language and Literature; History and Social Science.

Students who can earn a portion of these 22 counts upon Physics and Inorganic Chemistry, as is earnestly recommended, may be given credit for them, and the time thus gained will be devoted to intensive work in the medical branches.

As heretofore, those applicants who have successfully completed the first year in any academic college recognized by the Regents as maintaining a proper standard will be admitted to the first year of the medical course on presentation of the usual Regents' certificate, together with evidence of their year or years of college training. Attention is again called to the fact that the Medical College holds no entrance examinations, and therefore the applicant for admission must, except in the case of those who have had one or more years in an academic college, present the special Cornell Medical-Student Certificate granted by the Regents to those who have fulfilled the requirements, or must have the Regents' endorsement on the certificate that the requirements have been complied with.

PROPOSED COURSE FOR THE DEGREE IN ARTS (A.B.) AND IN MEDICINE (M.D.).

As a liberal education in the arts and sciences is of great advantage to prospective students of medicine, all who can are urged to take the Freshman, Sophomore, and Junior years in the Academic

Department at Ithaca. After the completion of these years in the Academic Department (in which all the work is elective) the student is permitted to elect, as the fourth year of his A.B. course and first year of his M.D. course, a year's work in the Medical Department at Ithaca. He may then take his fifth year of work—the second of the medical course—either in Ithaca or in New York; but he must take the last two years of the medical course in New York. In this way he will obtain the A.B. degree at the end of four years, and the M.D. degree at the end of seven years of study. This is possible because the first two years of the medical course in New York are offered in duplicate at the University in Ithaca.

Women must take the first two years in medicine in Ithaca, where special accommodations are provided for them in the Sage College. They are received at the Medical College in New York City in the third and fourth years only.

Students who have taken the A.B. degree, as above, will, if they have anticipated in the Academic Department the scientific studies prescribed in the medical course, be admitted to advanced standing in the Medical College in New York. Those who have completed all the subjects prescribed for the first two years of the course in medicine will be admitted to the third-year class. After passing the requisite examinations at the end of this and then of the fourth year, they will be advanced to practically a fifth year, consisting almost entirely of practical training. At its close, provided the work has been satisfactory, the M.D. degree will be conferred. As this fifth year gives opportunity for more than the requisite work, students who have taken the A.B. degree in the Academic Department may, even if deficient in one or more of the prescribed subjects of the medical course, still be admitted to the third-year class in New York, but only upon the recommendation of the Medical Faculty at Ithaca.

The schedule of this fifth year will be somewhat as follows:

There will be weekly recitations in the subjects of Medicine, Surgery, Anatomy, Materia Medica and Therapeutics, and Obstetrics

and Gynæcology. A competent corps of instructors is suggested by the Faculty, but the students are at liberty to make their own selection and financial arrangements in quizzing, the chief object of which is preparation for the competitive examinations for the appointment of internes held each spring by the various hospitals. The fee for such "quizzes" averages about $100, and the time will be from 5 to 6 P.M., or at any other convenient hour daily. The rest of the day is to be devoted to practical training in the College dispensary and laboratories. In the dispensary the departments of general medicine and general surgery hold, or are to hold, morning sessions. The afternoon hours are devoted to the nine specialty departments of Neurology, Gynæcology, Pediatrics, Laryngology, Orthopedic Surgery, Dermatology, Ophthalmology, Otology, and Diseases of the Genito-Urinary System.

The Ithaca students who take this fifth year will act as regularly appointed clinical assistants in these various departments for the twelve months following the conclusion of their fourth year of medicine. Groups of five will serve during the morning hours, on alternative days, in the Departments of General Medicine and Surgery. At the end of six months those who have had the privilege of selecting in the order of standing at the end of the fourth year general medicine will change to general surgery, and *vice versa*. In the mornings of the days when not engaged in the dispensary these groups of five students will report in one of the laboratories of clinical or histological pathology or bacteriology and, as they may elect, either pursue research work upon a subject to be selected after consultation with Professor Ewing, or act as assistant (unpaid) instructors in the class-room work in these laboratories. The results of research work, if satisfactory, will be included in the regular publications of the department of Pathology.

During the afternoons, groups of not more than three students will serve in rotation as clinical assistants in each of the nine specialty departments of the dispensary. The length of time spent in each department will vary somewhat with the number of students

and the duration of vacation desired; but at present it is expected that about one month will be devoted to daily attendance in each specialty. It is the intention of the Faculty to allow the utmost liberty in the selection of courses consistent with the acquirement of a thorough general and practical education. For this reason, if desired, the student will be assisted in obtaining the position of clinical assistant in any dispensary or department of a dispensary which supplies opportunities equivalent to those offered by the College. The internes in the various city hospitals are often forced to absent themselves from duty on account of sickness or other reasons. The members of the Faculty who visit such hospitals can thus frequently supply substitutes from competent students for these positions for longer or shorter periods. Such places, of course, cannot be promised in advance, but may confidently be expected by a greater or less number.

The required work of this fifth year is then briefly summarized as follows:

A quiz of at least one hour a week in each of the subjects of Medicine, Surgery, Anatomy, Materia Medica and Therapeutics, and Obstetrics and Gynæcology from October to April inclusive. At least two hours' daily service for four months each (preferably in the morning) in general medicine and general surgery in the College dispensary; at least two hours' daily service for one month (preferably in the afternoon) in each of the nine specialty departments of the College. If any of the work is elected in another dispensary or hospital, it must be one under the supervision of some member of the Faculty.

The fees for this year will be $100, payable in advance to the College; and a graduation fee of $25, payable at the end of the fifth year; and the fee payable to the quiz masters, of not more than $100.

REGENTS' ENTRANCE EXAMINATIONS AND CERTIFICATES.

The following requirements for admission to candidacy for a degree in *any medical college in New York State* were established by laws passed by the Legislature, to take effect March 21, 1896.

Medical-Student Certificate.

Each student who matriculates with the intention of becoming a candidate for the degree of doctor in medicine, whether he comes to New York to begin or continue the study of medicine, must file with the Dean of the College a medical-student certificate issued by the Regents of the University of the State of New York.

This certificate is granted according to the following extract of the Laws of 1896, ch. iii.:

To provide for the preliminary education of medical students.

The degree of bachelor or doctor of medicine shall not be conferred in this State before the candidate has filed with the institution conferring it the certificate of the Regents that before beginning the first annual medical course counted toward the degree (unless matriculated conditionally as hereinafter specified) he had either graduated from a registered college or satisfactorily completed a full course in a registered academy or high school; or had a preliminary education considered and accepted by the Regents as fully equivalent; or held a Regents' medical-student certificate, granted before this act took effect; or had passed Regents' examinations as hereinafter provided. A medical school may matriculate conditionally a student deficient in not more than one year's academic work or twelve counts of the preliminary education requirements, provided the name and deficiency of each student so matriculated be filed at the Regents' office within three months after matriculation, and that the deficiency be made up before the student begins the second annual medical course counted toward the degree. Students who had matriculated in a New York medical school before June 5, 1890, and students who had matriculated in a New York medical school before May 13, 1895, as having entered before June 5, 1890, on the prescribed three years' study of medicine, shall be exempt from this preliminary-education requirement.

A medical-student certificate may be earned without notice to the Regents of the conditional matriculation either before the student begins the second annual medical course counted toward the degree or two years before the date of the degree for matriculants in any registered medical school, in the four cases following :

1. For matriculants prior to May 9, 1893, for any twenty counts, allowing ten for the preliminaries, not including reading and writing.

2. For matriculants prior to May 13, 1895, for arithmetic, elementary English, geography, spelling, United States history, English composition and physics, or any fifty counts, allowing fourteen for the preliminaries.

3. For matriculants prior to January 1, 1896, for any twelve academic counts.

4. For matriculants prior to January 1, 1897, for any twenty-four academic counts.

But all matriculants, after January 1, 1897, must secure forty-eight academic counts, or their full equivalent, before beginning the first annual medical course counted toward the degree, unless admitted conditionally, as hereinbefore specified, when the deficiency must be made up before the student begins the second annual medical course counted toward the degree.

This act shall take effect March 21, 1896, except that the increase in the required course of medical study from three to four years shall take effect January 1, 1898, and shall not apply to students who matriculated before that date and who receive the degree of doctor of medicine before January 1, 1902.

Notes on the Law.

All matriculants after January 1, 1897, must secure forty-eight academic counts or their full equivalent before beginning the first annual course counted toward the degree, unless admitted conditionally, in which case the deficiency is not to exceed twelve academic counts and must be made up before the student begins the second annual course counted toward the degree.

2. The Regents will accept as fully equivalent to the required academic course any one of the following :

(*a*) A certificate of having successfully completed at least one full year's course of study in the collegiate department of any college or university registered by the Regents as maintaining a satisfactory standard.

Certificates should be issued in due form by the president, dean or principal of the institution, and should be signed under seal or acknowledged before a notary, unless the institution is in the University of the State of New York or the signature of the officer issuing is well known in the Regents' office.

(*b*) A certificate of having passed in a registered institution examinations equivalent to the full collegiate course of the freshman year or to a completed academic course.

Three full academic years of satisfactory work may be accepted as a high-school course till August 1, 1896, when four full academic years will be required.

(*c*) Regents' pass-cards for any forty-eight academic counts or any Regents' diploma.

(*d*) A certificate of graduation from any registered gymnasium in Germany, Austria, or Russia.

(*e*) A certificate of successful completion of a course of five years in a registered Italian *ginnasio* and three years in a *liceo*.

(*f*) The bachelor's degree in arts or science, or substantial equivalents from any registered institution in France or Spain.

(*g*) Any credential from a registered institution or from the government in any foreign state or country which represents the completion of a course of study equivalent to graduation from a registered New York high school or academy, or from a registered Prussian gymnasium.

3. March 22, 1898, the Regents approved the following modifications in requirements for medical-student certificates :

(*a*) **Partial Equivalents.**—Evidence of completion in a registered school of one or more years of satisfactory high-school work, and Regents' examinations in subjects representing the balance of the required four-year course (any 12, 24, or 36 additional counts).

(*b*) **Cumulative Credit.**—Regents' examinations in the second or third year of any language course will be accepted as including the preceding years in those courses.

(*c*) **Date of Certificate.**—Candidates unable to offer certificates of the required academic work in a registered institution may present evidence to the Regents that they had the required preliminary education before beginning the second course counted toward the degree, and may, on passing Regents' examinations, receive their certificates as of the date when the preliminary work was completed.

4. Other equivalent credentials from other States and countries besides those specified in the law, which may be accepted by the Regents in place of an examination, may be ascertained by written application to College and High School Department, University of the State of New York, Albany, N. Y.

5. Any student who has matriculated under the legal requirements in regard to Regents' examinations, existing at the time of matriculation, will not require another certificate whenever he may be graduated.

6. If students unable to offer equivalents come from out of the State, they may enter the second course counted toward the degree, provided that at the preceding June or September examination they meet the preliminary requirement, and further provided, that the medical student certificate can be dated back under (*c*) above.

Medical-student certificates issued on "equivalents" without examination, may be obtained at any time before the degree of M.D. is conferred, provided that the course of study for which the certificate is issued was completed within the prescribed time.

Examinations under the Act.

Students who do not obtain a medical-student certificate without examination must pass an examination on the subjects required by the Regents. These examinations are held entirely under the charge of the Regents in New York, and in many other places throughout the State, on the following dates:

CALENDAR OF REGENTS' EXAMINATIONS.

YEAR.	JAN.	MARCH.	JUNE.	SEPT.
1902	27–31	24–26	16–20	23–25
1903	26–30	25–27	15–19	Sept. 29 to Oct. 1

NOTE.—September examinations will be held in New York, Albany, Syracuse, and Buffalo, for law and medical students only. The other examinations are held in New York at the Grand Central Palace, Lexington Ave. and 44th St., and in numerous academies and high schools throughout the State for professional and academic students.

Extracts from Regents' Rules.

Order of Studies.—There is no restriction in the order in which studies may be taken. Advanced students who may come from other States, or who, for other reasons, have not passed in elementary subjects, may take them at any time: *e. g.*, arithmetic after algebra or geometry; English composition after rhetoric, etc.

Time Limit.—There is no limit of time, but all credentials issued by the university are good until cancelled for cause. Studies necessary to obtain any credential may be passed at different examinations.

Seventy-five per cent. of correct answers is required in all subjects.

Answer papers will be reviewed in the Regents' office, and all papers

below standard will be returned to the candidates. For those accepted, pass-cards will be issued.

Pass-Cards.—A Regents' pass-card is not limited in time; therefore it is not necessary to pass any Regents' examination a second time.

Medical-Student Certificate.—When all requirements are fulfilled, the Regents grant a medical-student certificate.

On receiving this certificate, the candidate must send it to the secretary or recording officer of the university or college at which he intends to study medicine.

N. B.—*Candidates for medical students' examination should send notice at least ten days in advance, stating at what time and in what studies they wish to be examined*, that required desk-room may be provided at the most convenient place.

Candidates who fail to send this advance notice will be admitted only so far as there are unoccupied seats.

Medical-Student Certificates Without Examinations.

Students who may be entitled to the medical-student certificates on equivalents (see notes on the law, 2, 3, 4, 5, and 6) are advised to present or forward their credentials to the Secretary of the College, who will send them to the Regents for examination and approval. They will be returned as soon as verified, and, if accepted, the proper certificate will be sent with them. The Secretary of the College will furnish, on application, blank forms of collegiate, academic, or high-school certificates.

Other equivalent credentials from foreign countries or from other States may be accepted by the Regents at their discretion.

The secretary will furnish full information on request.

Directions for Obtaining a Regents' Medical-Student Certificate.

1. Give the full name of the applicant, the exact name of the institution and of the department attended, an accurate description of the course pursued, using the same terms that are given in the official announcement, circular, or catalogue of the institution.

Send an official announcement, circular, or catalogue of the institution, showing:

(*a*) Requirements for admission; *i.e.*, subjects and years given to their completion.

(*b*) Requirements for graduation in each course, including subjects pursued and time devoted to each.

Amendment to Medical Law, 1901.

At their meeting July 1, 1901, the Regents took the following action:

Voted, That beginning with the September, 1901, medical licensing examinations a recent photograph of each candidate be required as a part of the application for admission; and

That in accordance with the medical law, as amended in 1901, the Regents admit conditionally to the tests in anatomy, physiology and hygiene, and chemistry, applicants certified as having studied medicine not less than two full years of at least nine months each, in two different calendar years, in a medical school registered as maintaining at the time a satisfactory standard; provided that such applicants are more than nineteen years of age, of good moral character, have the requisite preliminary education, and pay the fee of $25; the final examinations in surgery, obstetrics, pathology and diagnosis, and therapeutics, including practice and materia medica to be passed after having finished the full period of study and having received the medical degree; and

That candidates who have studied medicine not less than the minimum period of two years, whether undergraduates or graduates in medicine, be admitted conditionally as aforesaid to the examinations in anatomy, physiology and hygiene, and chemistry; that if such applicants fail to attain 75 per cent. in one or more of these three topics they must be reëxamined in all topics and must wait at least six months before reëxamination; and

That candidates failing to obtain at least 75 per cent. in one or more of the topics at the final examinations in surgery, obstetrics, pathology and diagnosis, and therapeutics, including practice and materia medica, after having passed in the three preliminary topics must be reëxamined in all four of the final topics and must wait at least six months before reëxamination.

JAMES RUSSELL PARSONS, JR.,
Secretary.

Regents' Office, Albany, N. Y.

REGISTRATION AND MATRICULATION.

Students on entering the College must register and pay the registration fee of $5. The payment of this fee is required only once. They will receive a receipt which will be exchanged for a certificate of full or conditional matriculation when they shall have

complied with the Regents' requirements for such matriculation; but students who have already been matriculated at a medical college in the State of New York, according to the Regents' requirements, and those who already hold a medical-student certificate, will be matriculated immediately on registration.

THE ADMISSION OF STUDENTS FROM OTHER ACCREDITED MEDICAL COLLEGES.

Admission to Advanced Standing.

Graduates of Cornell, Yale, Harvard, Princeton, University of Pennsylvania, Johns Hopkins, Columbia, University of Michigan, and other accredited universities, who have taken either a preparatory medical course or special work in organic or inorganic chemistry, physics, or physiology, will be allowed credit for the work which they have done, and may be excused from the recitations upon these subjects, and from the exercises of the chemical laboratory in the first year, provided they pass examinations before the professors of these departments, and provided they give to dissection and electives as described on pages 46–47, in the various departments, a full equivalent in hours to the subject they may have passed by examination.

Students who have had training in microscopical technique or in histology will be given advanced work in the histological laboratory.

Students who have already attended the requisite number of courses in other accredited medical colleges may be admitted to advanced standing in any one of the years of the four years' course of the Cornell University Medical College by presenting a Regents' medical-student certificate and by passing examinations in the subjects described on pages 89–91 as completed, in the year or years previous to that which the student desires to enter. The applicant must also present certificates of having satisfactorily completed laboratory courses equivalent to those required of the Cornell medical students in the year or years previous to that to be entered.

According to law, no student from a Medical School which has not been

registered by the Regents may obtain a degree on less than two years of medical study in this State.

Holders of Special Degrees.

Graduates of pharmacy or of dental or veterinary or other professional schools, who can present satisfactory evidence of having completed any course of study required in any year by this College, may upon passing a satisfactory examination be excused from attendance upon instruction in that subject, provided they take equivalent additional work in other branches.

Admission to Special Courses.

Graduates in medicine, or students who desire to pursue a special course without graduation, are admitted to registration as special students after approval by the head of the department conducting the course, without Regents' or other preliminary examination. Such special courses do not count in any way as part of the four years' course required of candidates for the degree of doctor in medicine. Further information regarding such courses, fees, etc., may be obtained by addressing the Secretary of the Cornell University Medical College, First Avenue, 27th to 28th Streets, New York.

NEW YORK STATE SCHOLARSHIPS.

Under the law of the State the Superintendent of Public Instruction is empowered to award annually a number of free scholarships in Cornell University equal to the number of Assembly Districts in the State. These scholarships entitle the holder to free tuition for four years in any department of Cornell University. They are awarded on examination to candidates from the general Assembly Districts "in consideration of their superior ability and as a reward for superior scholarship in the academies and public schools of this State."

For particulars in regard to these scholarships, application should

be made to the Superintendent of Public Instruction at Albany, N. Y.

Holders of State scholarships are notified that failure to register before the close of registration day involves the severance of their connection with the University and consequently the forfeiture of their scholarships. The President of the University is required by law to send immediate notice of such vacancies to the Superintendent of Public Instruction and the Superintendent fills vacancies forthwith.

UNIVERSITY UNDERGRADUATE SCHOLARSHIPS.

Pursuant to the action of the Trustees, there will annually be thrown open to competition for all members of the freshman or first-year class who are registered in courses leading to first degrees, at a special examination held at Ithaca, at the beginning of the freshman year, eighteen scholarships of the annual value of $200.

Students of high ability from the State of New York will have the additional advantage of being able to secure State scholarships, as there is nothing in the University statutes to prevent a student from holding both a State scholarship and a University scholarship.

These scholarships will be given for passing examinations which shall average the highest in any three of the following groups, of which group (*a*) must be one. Previous to entering this competitive examination, however, candidates are required to pass satisfactorily the regular entrance examination in English, or the entrance examination in English given by the College Entrance Examination Board. *School certificates, Regents' diplomas, and normal school diplomas* are not accepted in place of this English examination.

(*a*) Plane geometry and algebra through quadratic equations.

(*b*) Solid geometry, advanced algebra, plane and spherical trigonometry. (*c*) Greek. (*d*) Latin. (*e*) French. (*f*) German.

For further information in regard to the scholarships see the Register of Cornell University.

CHARGES FOR INSTRUCTION.

First Year.		
Registration[1]	$5 00	
Tuition	$150 00	
Laboratory fees	$35 00	
		$190 00
Second Year.		
Tuition	$150 00	
Laboratory fees	$30 00	
		$180 00
Third Year.		
Tuition	$150 00	
Laboratory fees	$30 00	
		$180 00
Fourth Year.		
Tuition	$150 00	
Laboratory fees	$25 00	
Graduation fees	$25 00	
		$200 00

Each student in the first three years is required to pay to the Clerk of the College ten ($10) dollars each year to cover breakage in the laboratories. This sum, less the amount charged against it for breakage, will be returned to him at the end of each year.

Tickets must be taken out and paid for at the beginning of the session.

SPECIAL STUDENTS.

Special students, on the recommendation of the head of the department concerned, may be admitted to any of the courses of instruction offered in the College, or to any course of instruction especially provided, on the payment of a registration fee of five dollars and a tuition fee of twenty-five dollars, except in dissection, where the tuition fee is fifteen dollars.

[1] The registration fee is payable only once, on entrance.

The graduation fee is payable on registering for graduation. The tuition fees for the first two years at Ithaca are identical with those of the same period in New York. All fees are payable at the beginning of the term, but in special cases they may be paid semi-annually in advance. No rebate will be made in any case.

No remission of laboratory fees will be made because of previous instruction elsewhere in the subjects.

GENERAL STATEMENT OF THE PLAN OF INSTRUCTION.

The chief features in the scheme of instruction are thorough laboratory training in all the subsidiary branches, daily recitations from standard text-books, clinical teaching in dispensaries and at the bedside in hospitals, and enough didactic lectures to make clear the general principles and conflicting theories in the practice of medicine and surgery. All students in any one class advance simultaneously in the various subjects, and no section or group works apart from any other, thereby losing the opportunity to appreciate the relationship of the different matters which at any given time may be under discussion. Allowance, however, has been made for those who through natural endowments or superior energy or previous education can outstrip their less fortunate fellows. A careful record is kept of the attendance and character of the work of every student, and by this means at the end of the year each is placed in the section to which this record entitles him. A system of electives in clinical, laboratory, and recitation work is also provided, which it is the aim of the Faculty to enlarge as opportunities arise. A student is required to master all the subjects taught in any given year before being allowed to advance to the next, as the knowledge acquired in each year is necessary for a proper understanding of that which follows. Examinations are held at the end of each session; a failure to pass not more than two subjects, one of which at least must be a laboratory subject, is allowed in the spring, but every subject must be satisfactorily passed at the beginning of the next ensuing college year, or the applicant will be compelled to repeat the work of the preceding year.

The essential feature of the entire system is the division of the classes of the several years into small sections for recitations, demonstrations, laboratory exercises, and for clinical instruction in the college dispensary, and in the wards of the numerous hospitals attended by the members of the faculty.

The following is a statement of the curriculum in each of the four annual sessions necessary to obtain the degree of M.D., and attention is called to the careful arrangement of the instruction in time and correlation in subject-matter so as to provide for a proper understanding and assimilation of the knowledge imparted in the different departments.

If a student, without neglecting his required schedule work, desires to take advanced work and can make an opportunity to do this, without interfering with the work of other students, he shall be permitted to do so and shall receive credit for it.

The first year is devoted to anatomy—several consecutive uninterrupted hours being provided for dissection—normal histology, chemistry, and physics. The gross anatomy of the thoracic, abdominal, and pelvic viscera is demonstrated in outline in the early weeks of the session in anticipation of the examination of these organs in the histological laboratory and a consideration of their physiology in the second half of the session. The department of physiology presents for consideration the cell, the blood, circulation, respiration, digestion, absorption, secretion and excretion, metabolism, and animal heat, in the order named. Thus the study of gross and histological anatomy and physiology advance together and in correlation with each other.

The general principles of mechanics, hydrostatics, optics, electricity, heat, and acoustics, and their application to medicine, are taught in lectures illustrated by experiments. Inorganic chemistry is studied in the laboratory throughout the year. The class is divided into small sections, each of which must attend daily one or more recitation exercises in anatomy, histology, physiology, and chemistry. These follow as closely as possible the practical work.

Students who have had the advantage of a thorough preliminary education in physics and chemistry before entering the medical school, after satisfactorily demonstrating to the professor in charge of this department, by examination or otherwise, that they are familiar with the work of the first year, may be excused from attendance upon these subjects. In their place they must elect at least one of the following courses given in the second year—namely, laboratory pharmacology, or physiological chemistry, or bacteriology.

During the second year anatomy, physiology, and chemistry are completed, and the study in text-books of medicine, surgery, obstetrics, and pathology is begun. The gross anatomy of the organs of special sense, and then that of the nervous system, is taught at the outset of the year by demonstrations to small groups of students. The demonstration of these organs is followed as closely as possible by the study of them in the histological laboratory during the first half of the session. The lectures and recitations in physiology follow the same course, and, in connection with the study of the gross and histological aspects of the parts under discussion, are more fully comprehended. Organic and physiological chemistry are studied in the laboratory and by lectures and recitations throughout the year. At the same time a laboratory course in pharmacology is pursued, familiarizing the student with the physical and chemical properties of drugs. Bacteriology is begun, the student commencing with the preparation and care of media and the recognition of the gross and microscopical characteristics of micro-organisms.

During the first few weeks of the term lectures are delivered upon the general principles of pathology, with particular reference to the elucidation and classification of the various forms of inflammation. The substance of these lectures will form the basis of the subsequent instruction in this subject in all departments, and thus insure uniformity in the teaching and understanding of the causes of disease. These lectures are supplemented by autopsies before small sections to

demonstrate gross lesions. Several weeks are given to practical instruction in normal physical signs as applied to the chest. Having obtained some knowledge of pathology, the student by means of recitations is made familiar with the principles of surgery, medicine, and obstetrics.

Students who have completed elsewhere courses in physiological chemistry or pharmacology equivalent to those of the second year, may by passing examinations at the beginning of the term be excused from further attendance upon them.

Students thus excused from part of the second-year work and those who have been allowed electives in their first year may take one or more of the following elective courses during their second year—namely: 1. Bacteriology in its practical relation to disease. 2. Materia medica recitations of the third year. 3. Manikin course in obstetrics. 4. Obstetrical clinic. The two latter elective courses are in preparation for the required work in practical obstetrics, which, usually taken in the third, can thus be taken during the second summer if desired.

Students are allowed to take the State Board licensing examinations in the primary subjects at the end of the second year. Those intending to reside in this State are encouraged to avail themselves of this opportunity.

In the third year medicine, surgery, materia medica, therapeutics, and obstetrics are studied systematically from text-books and practically at the bedside, in the dispensary, and in general clinics. A sufficient number of didactic lectures are given by the Professors of Medicine and Surgery at the beginning of the session to explain general principles in symptomatology and diagnosis. Throughout the year the class must attend in small sections one or more daily recitations from standard text-books upon subjects previously assigned and learned. Pathology is studied in greater detail than previously, both in the laboratory and in the dead-house, and as far as possible morbid processes are demonstrated in advance of the study of the disease in the text-book or its clinical presentation.

In conjunction with the bedside teaching, instruction is given in

all of the modern laboratory aids in diagnosis classified under the term of clinical pathology.

Students in groups of ten or twelve are taught the methods of examining patients for the detection of abnormal physical signs, and at the close of the session are expected to be familiar with the recognition and treatment of the common diseases and be conversant with the fundamental subjects of a medical education. The specialties taken up in this year are neurology, pediatrics, toxicology, and gynæcology. They are taught by clinical lectures as part of the general subjects of the practice of medicine, surgery, and obstetrics.

To meet the requirements of hospital and other boards of examination, such as those of the civil service or of the army and navy, students who wish to compete in these examinations may elect in third and fourth years to have all their recitation exercises with special instructors appointed by the faculty. A separate fee is required for this service.

The fourth year is devoted chiefly to the study of diagnosis and treatment of disease at the bedside, in the dispensary, and in clinics. The extent of this may be inferred from the present arrangement of the schedule, which contemplates about fifty hours of hospital-ward work in medicine and nearly the same number in surgery for every student. There are as few lectures as are consistent with the proper exposition of the chief problems confronting the profession, and these are delivered at the outset of the term, in order that the student may become familiar as soon as possible with the facts which are to be taught practically. For example, to the Professor of Medicine twelve didactic lectures are assigned. This proportion has to be exceeded somewhat in therapeutics, obstetrics, and the specialties, but many of these lectures are illustrated by the presentation of typical cases and are really clinics. The clinical instruction in surgery is supplemented by an operative course in which the student performs upon the cadaver all the common operations. Particular attention is also given to the methods of making medical and surgical diagnoses,

and in this connection constant use is made of the bacteriological and chemical laboratories, where the student examines specimens taken at the bedside during one exercise, and reports the results to the class at the next.

Hygiene and its application in the province of the physician and public health officer is taught by lectures supplemented by demonstrations of the plans and methods of the city health board.

The major part of the theoretical instruction, as in the previous years, is given by recitations in the subjects of medicine (including neurology), surgery (including orthopædic surgery and genito-urinary diseases), therapeutics, obstetrics, gynæcology, and pathology.

The instruction in the specialties, which is made the distinguishing feature of this final year, is begun with a few clinical lectures and is continued by a course in the examination and treatment of dispensary patients by each student. Every one receives from fourteen to twenty-one hours of this training (the number varies somewhat with the subject), and should become reasonably proficient in the use of instruments, the ability to make diagnoses and give relief. There is no attempt made to produce experts, but each one before graduation must know enough about the specialized branches of medicine to be a competent general practitioner. The lectures upon the physiology of the organs of special sense delivered in the fall to the second-year class, must also be attended by the seniors. These lectures serve as an introductory review of facts necessary for a proper knowledge of the specialties and obviate unnecessary repetitions by the different professors.

Every student must personally attend a definite number of cases of labor, and for this purpose the maternity service open to the college offers excellent opportunities. The faculty earnestly recommend that this work be accomplished in the summer preferably of the third year; by the proper choice of electives it is possible in the second summer, but this is not as desirable or profitable. If taken during the regular winter session much loss in other work may result. Those who for any proper reason cannot take this

course as advised in the summer might, however, succeed in obtaining the necessary cases during the winter by selecting odd hours when not engaged in section work, and by arrangement with the office to receive telephone calls.

As in the previous year, there are the same electives in recitations for those who wish particularly to fit themselves for hospital and other competitive examinations. There is also offered an advanced course in neurology in a hospital devoted largely to the care of this class of patients. There will in addition be elective practical courses in the dispensary as opportunity arises.

DETAILS OF THE PLAN OF INSTRUCTION.

ANATOMY.

GEORGE WOOLSEY, M.D., *Professor of Anatomy.*
IRVING S. HAYNES, M.D., *Professor of Practical Anatomy.*
DR. WILLIAM F. STONE, *Instructor.*

Assistant Demonstrators of Anatomy,

DR. WILLIAM F. STONE,
DR. FRANK S. FIELDER,
DR. ANDREW H. MONTGOMERY,
DR. JOHN A. HARTWELL,
DR. CLARENCE A. MCWILLIAMS,
DR. JOHN F. CONNORS.

Anatomy is taught in the first and second years by lectures, recitations, section demonstrations, and dissection. The course in anatomy is arranged to correspond as far as possible with the courses in physiology and histology.

Lectures in the first year are confined to the practical applied anatomy of the bones and joints, and follow the recitations on these subjects. In the second year the lectures are devoted to regional surgical anatomy, the students being already well grounded in descriptive anatomy. The order of subjects is head

and neck; thoracic, abdominal, and pelvic cavities and viscera, and perineum.

One lecture a week is given during the second year by the Professor of Practical Anatomy on the development and gross anatomy of the nervous system, the gross anatomy and relations of the extremities and the viscera.

Professor Gage will give six lectures on embryology during the month of January to second-year students.

Descriptive Anatomy is taught by recitations, section demonstrations, and dissection.

Recitations, from standard text-books, are held by the Instructor in Anatomy twice a week for each section of the first-year class and once a week for each section of the second-year class. During the first year bones, joints, muscles, arteries, and veins are recited upon; during the second year the nervous system and the viscera. Written reviews are held at intervals under the direction of the Professor of Anatomy, the last of which is an examination of the year's work. In the first year the students of each section begin to recite upon the bones of that part which they are to dissect at the end of the first fortnight, and so on for the remaining parts.

PRACTICAL ANATOMY.

Section Demonstrations are conducted by the Professor and Assistant Demonstrators of Practical Anatomy once a week for each section during the first and second years. During the first three months of the first year the students are prepared for their dissection by recitations in the class-room upon the bones, and by section demonstrations on the cadaver of the part they are to dissect in the following fortnight. By these means they are taught how to dissect, what to find, and where to find it. In addition, one preliminary demonstration is given weekly from October to January on the thoracic, abdominal, and pelvic viscera, to prepare students for the courses in physiology and histology by demonstrating the

organs whose function and structure they are to study. In the last half of the first year the joints are demonstrated. In the second year the brain and nervous system, the organs of sense, the thoracic and abdominal viscera, and the perineum are demonstrated.

Dissection.—The course in dissection is arranged on a laboratory basis—that is, the students are required to dissect during certain specified hours each day while the demonstrators are in attendance. This insures more satisfactory work on the part of the students and better supervision and teaching on the part of the demonstrators. Ten hours a week are assigned in the schedule for this anatomical laboratory course during the first and second year. In addition dissection is permitted at any time after 10 A.M. that the students are at leisure.

Two courses of dissection are required. The first course for first-year students comprises the dissection of three parts—the head and neck, and upper and lower extremities. This course is begun after the recitations and section demonstrations have prepared each student for the part assigned to him, and includes the dissection of the joints.

The second course consists of the dissection of four parts and is designed for second-year students and those first-year students who have completed the first course. This course includes a review of the first course, with more particular attention paid to the minuter parts, and, in addition, the dissection of the brain, the trunk, with the thoracic and abdominal viscera, and the perineum. A considerable part of the second course may be finished during the first year. This will afford time in the second year for additional and advanced work after completing the required parts. Students are examined and marked on the dissection of each part required. Prepared bones are loaned to students during the session from a large collection kept for this purpose. Preliminary training in comparative anatomy is very desirable.

Examinations.—A practical, in addition to a written, examination is held by the Professor of Anatomy at the end of the second

year. At the end of the first year there is a written review or examination on the work of the year.

Advanced, Special, and Post-Graduate Courses.—Facilities are offered to students and the medical profession for pursuing advanced, special, and post-graduate courses in practical anatomy.

PHYSIOLOGY.

AUSTIN FLINT, M.D., LL.D., *Professor of Physiology.*

Assistant Professor,
DR. JOHN A. HARTWELL.

Instructor,
DR. JOHN A. HARTWELL.

Assistants,
DR. LOUIS NEUMANN.
MR. ALVIN W. BAIRD.

Instruction in this branch is given by systematic lectures and recitations, with practical demonstrations and exercises, to first-year students during the second half of the session, and to second-year students during the first half of the session. During the second half of the session, review recitations, covering the entire first-year and second-year courses, are held once a week for the second-year class by the instructor, as a preparation for the final college and the State examinations.

The experience of the past four years has made it evident that first-year students are not well prepared to take up the study of physiology proper, without some general knowledge of the gross anatomy of the thoracic and abdominal viscera and the histology of the heart and blood-vessels, respiratory organs, alimentary canal, and the glandular organs. As regards gross anatomy, this preparation is afforded by section demonstrations in the department of Practical Anatomy, and the histology is taught in the laboratory and by recitations—all during the first half of the session.

The regular second-year work in physiology is given during the

first half of the session. Second-year students receive laboratory instruction in physiological chemistry from the department of Chemistry, Physics, and Toxicology. The same department gives instruction in optics and acoustics to first-year students, which serves as a preparation for the study of vision and audition in the second year. Second-year students receive laboratory instruction from the department of Histology in the histology of the nervous system and the organs of special sense. They also receive instruction from the department of Anatomy in the anatomy of the encephalon and cranial nerves.

Lectures.—The regular lectures for the first-year class begin about the middle of January, and are continued three times weekly until the close of the session, on the following subjects and in the order named: The cell, blood, circulation, respiration, digestion and absorption, secretion and excretion, general metabolism, and animal heat. The regular lectures for the second-year class begin at the opening of the session, and are continued three times weekly until about the middle of January, on the following subjects and in the order named: The special senses, the nervous system, and embryology. Five lectures on embryology, given in January by Professor Flint, are devoted to the development of the ovum up to and including the formation of the membranes. Professor Gage, of Ithaca, gives six lectures in March, profusely illustrated, on the development of systems and organs in the embryo and fœtus. The first nine lectures of the course devoted to the special senses are given to the second-year class and the fourth-year class together. Fourth-year students are thus enabled to review the physiology of the special senses as a preparation for the study of ophthalmology and otology.

Throughout the entire course, while the subject of human physiology proper is fully covered, special attention is paid to its applications to the practice of medicine and surgery, much time being devoted to what may be called applied physiology.

Recitations, Section Work, etc.—Certain of the work in the histological laboratory is practically a part of the instruction in

physiology. For first-year students, this includes laboratory work and recitations on the cell and karyokinesis, ciliary movements, blood, the histology of the simple tissues, heart, and vessels, respiratory system, digestive system, glandular organs, and the cellular mechanism of secretion. For second-year students the instruction includes a study, in the same manner, of the nervous system, organs of special sense, and the genito-urinary system. The instruction in physiological chemistry is given in the department of Chemistry to second-year students. It includes lectures upon physiological chemistry, laboratory work, and recitations on the carbo-hydrates and fats, proteins and albuminoids, food-stuffs, and the digestive secretions, endosmosis and exosmosis, and the chemistry of blood, bile, urine, and the simple tissues.

In addition to the work in histology and physiological chemistry and in close connection with the lectures on physiology proper, the Assistant Professor will give, three hours weekly, recitations, with frequent demonstrations and practical exercises, to each class, divided into sections of convenient size, for first-year students during the second half of the session, and for second-year students during the first half of the session. One additional room will be devoted weekly to demonstrations to each entire class of the subjects considered in the regular lectures for each week.

In the section-teaching, many demonstrations, by means of specimens, models, and apparatus, will be given, which cannot with advantage be made before the entire class, such as blood-counting, the capillary circulation, blood-pressure, the use of the sphygmograph, the general physiology of nerve and muscle, etc.; but care will be taken not to occupy valuable time in the repetition of practical work done in the departments of histology and physiological anatomy.

In the course of the section-work, students who prove themselves capable may be permitted to aid in the preparation and giving of the demonstrations when this does not interfere with other exercises, this corps of student-assistants being changed from time to time so that the privilege may be extended to as many as possible.

CHEMISTRY, PHYSICS, AND TOXICOLOGY.

RUDOLPH A. WITTHAUS, M.D., *Professor of Chemistry.*

Assistant Professor,
DR. IVIN SICKELS.

Instructors,
DR. LOUIS W. RIGGS, DR. CHARLES G. L. WOLF.

Lectures.—Students of the first year will receive three lectures each week on physics, the divisions of the subject being considered in the following order: General properties of matter and force, mechanics, hydrostatics, pneumatics, optics, electricity, heat, and acoustics. The lectures will be abundantly illustrated, and the relations of physics to surgery and medicine will be particularly considered.

During the second year, students will attend two lectures weekly. Organic chemistry will be considered in the earlier part of the term to an extent sufficient to impart a knowledge of the principles of combination of the carbon compounds and the properties and relationships of those which are of physiological, toxicological, or therapeutical interest. The lectures during the latter part of the second year will be upon physiological chemistry.

During the third year one lecture will be given weekly on toxicology for twenty weeks. In these lectures the medical and medico-legal bearings of the subjects will be chiefly considered.

Recitation.—Students of the first year will recite twice each week on the principles of chemistry and mineral chemistry. Those of the second year will recite once weekly on organic and physiological chemistry.

Laboratory Work.—Laboratory instruction will be given students of the first year four hours weekly during the entire session. This course will consist of an experimental study of the commoner elements and compounds in illustration of the recitation course,

and of training in the processes of qualitative analysis of inorganic substances, and mineral poisons.

Students of the second year will receive laboratory instruction two hours weekly until February 14th, and four hours weekly after that date in physiological and clinical chemistry and organic toxicology.

Each student is fully supplied with all apparatus and chemicals required, except urinometers, which are carefully corrected for the student that they may serve for future use.

These courses are conducted by the Assistant Professor, and by the instructors under the direction of the Professor of Chemistry and Physics.

First-year students presenting satisfactory evidence of having performed equivalent work in chemistry and physics will be excused from first-year work in this department, and be given advanced laboratory work equivalent in hours to that omitted.

MATERIA MEDICA AND THERAPEUTICS.

HENRY P. LOOMIS, M.D.,
Professor of Materia Medica and Therapeutics.

Instructors,

DR. WARREN COLEMAN, DR. EDMUND P. SHELBY,
DR. WALTER ARTHUR BASTEDO, Ph.G.

Clinical Assistant,
DR. WILLIAM J. JONES.

Instruction is given in this department during the second, third, and fourth years by means : 1. Lectures. 2. Clinical instruction. 3. Recitations. 4. Laboratory work.

Lectures.—These are given by the Professor twice a week to the

third-year students and once a week to the fourth-year students. They are confined almost exclusively to therapeutics, as it is believed that materia medica can best be taught by recitations and by laboratory work.

The lectures to the third-year students will consider the therapeutic uses of the most important drugs from the standpoint of the drug itself, such as the methods of prescribing the drug and the conditions for which it is given; only so much of the physiological action of the drug will receive attention as will explain its therapeutic value.

The lectures to the fourth-year students will be confined almost exclusively to a consideration of the systematic treatment of the different diseases. The plan of treatment will be given in detail, with definite instruction as to the drugs to be used and the preparations which are most reliable.

Lectures will be given on remedial agents other than drugs, such as massage, dietetics, climatology, mineral waters, and hydrotherapy.

Clinical Instruction.—A new departure in the teaching of therapeutics will be made by affording the students of the third and fourth years opportunity to observe the effects of the different remedies on the natural course of diseases. To accomplish this the classes will be divided into small sections and taken by the Professor into the wards of Bellevue Hospital. Actual practice is given in the employment and application of the various therapeutic agents used in medicine, such as the aspirator, leeches, cups, cautery, stomach-tube and stupes. The hydropathic establishment connected with this hospital is one of the most complete in the country. Here to small sections will be demonstrated the various applications of water to the treatment of disease—such as baths, packs, douches, etc. A professional masseur will show the technique of massage and the Swedish movements. The treatment of the different diseased conditions observed will be systematically studied, and opportunities will be given to the members of the class to make personal examination of the patient and to watch the modification of disease produced by the remedies prescribed. The clinical work of the third and fourth

years affords abundant opportunities for further training in practical therapeutics. A general medical clinic will be held by the Professor once a week in the amphitheatre of Bellevue Hospital, at which special attention will be given to the treatment of the diseases under consideration.

Recitations.—Students of the third year will recite to the instructor twice a week from a standard text-book. During the fourth year a recitation will be held once a week on therapeutics.

The recitations will embrace a study of the action of all the more valuable remedial agents in connection with the description of the drugs themselves.

Each student will be thoroughly drilled in prescription-writing and in the doses of the more important drugs.

Examinations will be held at stated times during the session by the Professor to enable him to judge of each student's progress.

Laboratory Work.—The laboratory of Materia Medica occupies two floors of the Loomis Laboratory building; it is provided with a complete assortment of crude drugs and with all the various preparations of the Materia Medica; also with appliances for instruction in the methods of manufacturing pharmaceutical preparations. The laboratory is equipped with instruments and appliances for special research in the physiological action of drugs. The large class room is supplied with sixty tables, equipped with gas, electric lights, water connections, and full apparatus, enabling each student to work separately under the supervision of the instructors.

The course of laboratory instruction is taken during the second year, and consists of six hours each week for half the year. The class is divided into small sections, which are under the personal supervision of the instructors. The method of teaching is distinctly practical. The student is made familiar by the laboratory work with the physical and chemical properties of drugs. This course includes such subjects as the forms of drugs, their weight and bulk, the measurement of solid and fluid drugs, methods of administering medicines, particularly with reference to appropriate combinations,

and the study of solubilities. The subject of incompatabilities is clearly demonstrated.

Prescription-writing is taught throughout the course, and test prescriptions are compounded by members of the class.

MEDICINE.

W. GILMAN THOMPSON, M.D., *Professor of Medicine.*

Professors of Clinical Medicine,

ALEXANDER LAMBERT, M.D., CHARLES E. NAMMACK, M.D.,
WARREN COLEMAN, M.D., LEWIS A. CONNER, M.D.

Instructors and Assistant Instructors,

DR. DEVER S. BYARD, DR. JOHN W. COE,
DR. THOMAS WOOD HASTINGS, DR. C. N. BANCKER CAMAC,
DR. MONTGOMERY H. SICARD.

The Course of Medicine, extending over three years, is so graded that the student pursues a logical sequence of work throughout. No didactic lectures upon the Practice of Medicine are delivered, their place being taken by bedside instruction and recitations. The course comprises the following subdivisions:

Second Year:

Recitations upon elementary topics.
Normal physical signs of the chest.

Third Year:

Recitations from an advanced text-book, including written reviews.
Abnormal physical signs of the heart and lungs.
Bedside history-taking.
Bedside course in symptomatology.
Clinical pathology.

Bedside course in medical diagnosis.
Eighteen lectures on symptomatology.
Hospital medical clinics.

Fourth Year:

Advanced bedside course in symptomatology and diagnosis.
Demonstrations of patients by the student before the class.
Courses in the out-patient clinic in medicine.
Dispensary medical clinics.
Hospital medical clinics.
Medical conferences.
Twelve lectures upon diatheses, toxæmias, etc.
Elective advanced work in clinical diagnosis (clinical pathology, history-recording, etc.).
Review quizzes for State Board examinations.

The details of the methods of instruction in medicine for each year of the curriculum are as follows:

Second-Year Students.

Recitations.—Second-year students begin the study of medicine with systematic recitations, in which the subjects of nomenclature, etiology, morbid anatomy, and typical symptoms only are dwelt upon.

Physical Diagnosis.—Normal physical diagnosis of the chest is taught by Dr. Byard to sections of ten students each on patients from the dispensary. Each student is required to map out upon the patient the normal positions and sounds of the thoracic viscera, and toward the end of the course of twelve lessons a few abnormal cases are introduced for comparison.

Third-Year Students.

Recitations.—Third-year students recite twice a week from an advanced text-book on Practice of Medicine, special emphasis being given to symptomatology, complications, diagnosis, and treatment.

Written reviews are held at intervals to familiarize the student with examinations. All recitations are obligatory, and the recitation marks received form an important component of the final examination marks of the year.

Ward Work.—Systematic and obligatory ward work is begun in classes not exceeding fifteen students each, who accompany the Professors of Clinical Medicine on rounds through the hospital wards. Examples of all the common diseases are studied, and the advantage to the student of personally examining many cases of such diseases as typhoid fever, pneumonia, nephritis, cardiac ailments, etc., in different stages of development, and of following their daily progress, far outweighs the obsolete system of attendance upon didactic lectures. The student is first taught to observe and describe symptoms and investigate etiology, and as he attains proficiency is required to make diagnoses, offer prognoses, and suggest treatment.

General Diagnosis.—Dr. Coleman gives a special course in general medical diagnosis, in which at one lesson the student is required to examine, compare, and report upon each variety of pulse found in the ward ; at another, upon each variety of cachexia, anæma, or œdema ; at another, upon each variety of abnormal liver or spleen ; and so on, comprising all the important physical examinations.

Clinical Laboratory Courses are conducted under Dr. Camac's supervision in immediate connection with the study of hospital and dispensary cases.

The laboratory is designed to meet the three following requirements :

1. *Teaching.*

The third-year class is divided into small sections, so that each member receives the personal assistance of the demonstrator. At the conclusion of the course a written and practical examination is held, and the result of this, as well as the character of the work done by each student, is included in the general average received by him in medicine. When assigned to cases at the general medi-

cal clinic the fourth-year student is required to report the result of his examination of the sputum, blood, urine, etc. Students of this year also, reporting at the medical conferences, for which longer time is allowed for preparation, make more extended research in the laboratory.

The apparatus employed is of such simple nature that it can readily be transported to the bedside, the work being thus essentially practical and such as is a direct guide to diagnoses. The student *himself* uses the apparatus so that he may become familiar with its care and application.

The student thus acquires a knowledge of the methods and technique in the third year, which he in the fourth year applies.

Following is a brief outline of the course—third year:

Blood.—Technique of obtaining blood specimens; normal constituents of blood; blood formation in bone marrow; corpuscle counting and hæmoglobin estimation; technique of fixing and staining specimens; diseased conditions determined by differential counting; study of blood-serum diagnoses; leucocytosis; malarial and other blood parasites; medico-legal value of blood stains.

Sputum.—Collection and examination of the gross specimen; disinfection of sputum cups, etc.; specimens of sputum in asthma, pneumonoconiosis, tuberculosis, gangrene, and hemorrhage from the lungs, pneumonia, etc.; diphtheria and other bacilli.

Gastric Contents.—Examination of vomitus; administration of test meals; method of obtaining and examining gastric contents.

Fæces.—Method of obtaining and examining; intestinal parasites, and ova.

Urine.—Microscopic examination with reference to diagnosis; gonococci, tubercle bacilli, etc., seminal fluid in its medico-legal aspect, crystalline deposits.

Exudations and Transudations.—Ascitic and pleuritic effusions, cystic contents, vaginal discharges.

Each student is furnished typical specimens which he stains and

studies at the demonstrations. Fourth year. Application of these methods as the cases arise.

2. *Original Research.*

Facilities are offered to graduates and undergraduate special students for the undertaking and publication of original investigations.

Special courses for advanced students are to be offered at times most convenient to such students.

3. *Dispensary, Hospital, and Clinical Laboratory Examinations.*

The laboratory is a working part of the Cornell dispensary. The visiting staff of this dispensary, as well as that of the adjacent hospital, use the laboratory extensively for completing the data of their cases. Students who have completed their third year, and whose standing is good, may, under the supervision of the instructors, employ their summer months in following this work in the laboratory.

The number of students thus employed will of necessity be limited.

Careful records of such examinations are kept for future reference, and from which valuable clinical deductions may be made.

Physical Diagnosis.—Physical diagnosis of abnormal conditions within the chest is taught by Professor Lambert to classes not exceeding a dozen students each. This course of twelve lessons for each class is very comprehensive, owing to the large number of patients in the class of heart and lung diseases at the college dispensary and in the wards of Bellevue Hospital.

General Medical Clinics.—Students of the third year are required to attend a clinic in general medicine conducted by Professor Lambert (commencing in December), and also the clinic in medical diagnosis conducted by Professor Thompson, and the clinic in general therapeutics by Professor Loomis, as described for the fourth year. These clinics are held weekly in the amphitheatre of Bellevue Hospital.

Lectures.—A course of eighteen lectures upon general symptomatology is given by the Professor of Medicine, which is designed

as introductory to the systematic bedside teaching which he conducts upon hospital rounds.

Fourth-Year Students.

Bedside Instruction is given by the Professor of Medicine to sections not exceeding fifteen students, in the wards of the Presbyterian Hospital until January 1st, and in those of Bellevue Hospital thereafter, throughout the year. In these sections each student is assigned in turn to special cases for thorough study. Ward classes are also conducted by Dr. Conner at the Hudson Street Hospital, and by Dr. Nammack in Bellevue Hospital.

Clinics.—Medical clinics are held weekly in the amphitheatre of Bellevue Hospital by the Professor of Medicine. At these clinics students read written histories of cases which they have studied on the previous day. They are required to demonstrate their findings upon the patient, and are questioned before the entire class in regard to diagnosis, etc. These clinics are also utilized by the Professor of Medicine to exhibit cases of exceptional rarity or difficult diagnosis. A second general medical clinic is held weekly in the Bellevue amphitheatre by the Professor of Therapeutics, at which the effects of treatment are made the prominent feature.

An out-patient clinic is also held weekly by the Professor of Medicine in the dispensary of the college, at which students are given ample opportunity to examine patients, study minor ailments, as well as all the forms of disease in the ambulatory of a large and varied clinical service.

Lectures.—A course of twelve lectures is given by the Professor of Medicine upon such general topics as the diatheses, toxæmias, immunity, autointoxication, cachexias, etc.

Medical Conferences.—Under Dr. Coleman's direction, students are assigned to special cases which they study in detail for several weeks, reviewing the literature of the subject, and which they

then report in writing at a medical conference, at which their fellow-students are called upon to offer criticisms and general discussion.

Students also attend special classes in the dispensary, in which they assist in recording case histories and examining patients, and during the latter part of the year recite in a review quiz in preparation for hospital and State Board examinations. An elective course in advanced clinical pathology and diagnosis is offered in the fourth year.

SURGERY.

LEWIS A. STIMSON, M.D., *Professor of Surgery.*

Professors of Clinical Surgery,

FREDERIC S. DENNIS, M.D., FREDERICK W. GWYER, M.D.,
GEORGE WOOLSEY, M.D., FRANCIS W. MURRAY, M.D.,
FREDERICK KAMMERER, M.D., PERCIVAL R. BOLTON, M.D.,
ALEXANDER B. JOHNSON, M.D.

Instructors,

DR. JOHN ROGERS, JR., DR. BENJAMIN TILTON,
DR. ARCHIBALD E. ISAACS, DR. CHARLES L. GIBSON.

Assistants,

DR. WILLIAM F. STONE, DR. H. M. ARCHER.

Surgery will be taught in the recitation room, at the bedside, at hospital clinics, and by lectures.

In the second year the students are required to attend recitations on the principles of surgery two hours a week throughout the term. For this purpose the class is divided into small sections to insure thorough work; so far as time permits instruction will also be given at the bedside.

In the third year recitations are continued upon regional surgery; the class is instructed in sections in Bellevue Hospital in history-taking and methods of surgical examination and diagnosis,

two or three hours a week for part of the term; bedside instruction is given in several hospitals to small groups, and formal clinics are held in Bellevue, New York, and other hospitals; about thirty lectures will be given by the Professor of Surgery, and a clinic for diagnosis is held once a week for the first half of the term, and thrice a week for the second half, at which the students are required personally to examine and report upon the cases.

In the fourth year the students will receive clinical instruction in small groups in several hospitals and dispensaries upon general surgery and the special branches—eye, ear, nose and throat, genito-urinary diseases, dermatology and orthopedics; may attend the lectures and clinics, and will have a review quiz in preparation for examination.

The members of the sections are trained in the examination of patients, the dressing of wounds and fractures, the administration of ether and assisting at operations.

The opportunities for the instruction in the special branches are exceptionally ample. There will be several clinical teachers in each subject, each with hospital and dispensary services. The student will be enabled directly to examine and study cases, and will have a certain choice as to the time given to each branch.

In addition to the clinics at Bellevue and the New York hospitals specified above, Professors Murray and Gibson will give clinics at St. Luke's and the General Memorial hospitals at dates to be announced during the session.

Operative Surgery will be taught to small sections of the class in the fourth year. The course consists of recitations, work upon the cadaver, and bandaging. As the material is abundant, each member of the class will perform the principal surgical operations.

Special instruction in operative surgery is offered to graduates in medicine. A circular giving particulars may be had on application to the Secretary.

OBSTETRICS.

J. Clifton Edgar, M.D., *Professor of Obstetrics and Clinical Midwifery.*

Instructors,

Dr. George D. Hamlen, Dr. George G. Ward,
Dr. Gustave Seeligmann, Dr. Albertus A. Moore,
Dr. I. L. Hill.

Instruction in obstetrics will be given during the second, third, and fourth years by—

1. Recitations. 2. Illustrative lectures. 3. Obstetric clinics and conferences. 4. Attendance upon cases of confinement. 5. Manikin practice and section work. 6. Obstetric histology, pathology, and bacteriology.

1. Recitations from a standard text-book will be held by an instructor in obstetrics during the second year upon the physiology, and during the third upon the pathology, of obstetrics, the latter including obstetric surgery.

These recitations are so scheduled as to cover the entire field of the subject laid out for the college year, are supplementary to the work of the Professor of Obstetrics during each of these two years, and prepare the student for an intelligent appreciation of his subsequent illustrative lectures, obstetric conferences, attendance upon cases of confinement, clinics, and manikin practice.

2. The Illustrative Lectures comprise a systematic course, running through the third year, upon the physiology and pathology of obstetrics.

These lectures are theoretical to a limited extent only, being mainly demonstrative and illustrative in character. To this end ample blackboard space is used, as well as an abundant collection of pelves, entire, normal and deformed, mesial sections of the same, and

in addition a supply of diagrams, charts, carefully selected plaster, composition, and metal models, wet and dry preparations, and instruments.

In conjunction with these lectures additional recitations are held by the Professor of Obstetrics upon the subject-matter of the college year and for final review.

3. Obstetric Clinics and Conferences.—A weekly obstetric clinic is held a portion of the year for both the third- and fourth-year classes. At this clinic abnormal cases of pregnancy, labor, and the puerperium are demonstrated, and the major and minor obstetric operations performed.

In addition, infant feeding and the care of mother and child during the lying-in period and early infancy are taught. During both the third and the fourth year, members of the class will be called upon in rotation to examine patients and discuss etiology, diagnosis, prognosis, and treatment. These "obstetric conferences" will review the illustrative lectures, manikin work, and the student's work in his attendance upon confinement cases. By this means each individual student's standing in the department of obstetrics is ascertained. During the latter half of the second year six obstetric clinics are given at the hospital. Attendance upon these clinics is optional.

4. Attendance upon Cases of Confinement.—Each candidate for the degree of M.D. is required to present satisfactory evidence to the effect that he has attended a definite number of cases of confinement.

During the student's attendance upon his practical maternity course he may be excused from the exercises of the College during the fourth college year, otherwise he shall take his practical obstetric course during vacation time. Students will attend confinement cases under the supervision of the clinical instructors, and may obtain further information concerning their practical obstetric work by applying at the Secretary's office.

5. Manikin Practice and Section Work.—Manikin practice is given to sections of the class during the fourth or senior year,

and consists of work by individual students upon the manikins, under the supervision and criticism of an instructor.

The mechanical phenomena of labor; modes of delivery; abnormal presentations and positions, with methods of delivery of each; version; application of the forceps, and other manipulations, will be demonstrated by the instructor and performed by the student.

Diagrams, models, casts, wet and dried specimens, will be used in the demonstrations.

The sections will also be instructed at the bedside in the management of pregnant and parturient women, the care of the new-born child, abdominal palpation, and pelvic mensuration.

6. Obstetric Histology, Pathology, and Bacteriology.—Laboratory instruction is given during the third year by the Professor of Pathology upon the histology of the vulva, vagina, uterus, ligaments, Fallopian tubes, and ovaries in the pregnant and non-pregnant conditions, and upon the histology and pathology of the decidua, chorion, placenta, and umbilical cord.

GYNÆCOLOGY.

WILLIAM M. POLK, M.D., *Professor of Obstetrics and Gynæcology.*

Instructors,

DR. CHARLES C. BARROWS, DR. WILLIAM TRAVIS GIBB,
DR. GEORGE D. HAMLEN, DR. JOHN ASPELL.

Instruction in gynæcology is given by recitations, lectures, ward- and class-room demonstrations, clinics, and laboratory demonstrations.

Six Lectures, upon topics selected for their special interest and importance to the subject as a whole, will be given at the beginning of the fourth year.

Recitations are planned to cover the entire subject, and are

held one hour a week during the third year of the course. In order that the instruction throughout the department may be as nearly in unison as possible, a synopsis of the subject-matter of each lesson is prepared by the instructor and amended and revised by the head of the department. This is presented to the student for comparison with his text-book, to which it is an addendum. This method insures the coöperation of the head of the department in the groundwork of his subject and enables him to keep in touch with each student until his graduation.

Class-room and Ward Demonstrations are given to sections of the fourth-year class twice a week throughout the year. This instruction includes the examination of patients by the students, who are thereby drilled in the methods of physical diagnosis as applied to the pelvis. When necessary the patients are anæsthetized.

The routine of treatment appropriate to the various conditions found is demonstrated, the students assisting when possible. In this way, not only is familiarity acquired with normal conditions within the pelvis and the various departures from this state induced by disease, but opportunity is afforded to see and put in actual practice measures of relief and to watch the subsequent course and treatment of these cases.

Operations are performed three days every week at which the several sections are enabled to study the detail of every operation peculiar to this department.

A General Clinic is held once a week at which students selected in rotation are required to examine the patient, make a diagnosis, and suggest treatment. They are questioned before the class upon all these topics, as they relate to the case in hand, so as to determine the correctness of their conclusions. Should operation be called for, it is then performed.

Laboratory Demonstrations of secretions, discharges, and specimens obtained from patients who come under observation during this course are made to sections of the third-year class as a part of the course in clinical pathology.

DEPARTMENT OF PATHOLOGY.

INCLUDING HISTOLOGY, GROSS AND MICROSCOPICAL PATHOLOGY, AND BACTERIOLOGY.

JAMES EWING, M.D., *Professor of Pathology.*
DR. BERTRAM H. BUXTON, *Instructor in Bacteriology.*
DR. OTTO H. SCHULTZE, *Instructor in Gross Pathology.*
DR. JEREMIAH S. FERGUSON, *Instructor in Histology.*
DR. MAX G. SCHLAPP, *Instructor in the Histology and Pathology of the Nervous System.*
DR. JAMES C. JOHNSTON, *Instructor in Pathology.*
DR. GUY D. LOMBARD, *Assistant Instructor in Histology.*
DR. HENRY S. PASCAL, *Assistant Instructor in Histology.*
DR. HENRY T. LEE, *Assistant Instructor in Pathology.*
DR. WILLIAM J. ELSER, *Assistant Instructor in Pathology.*
DR. ALFRED E. THAYER, *Assistant Instructor in Gross Pathology.*
DR. LETCHWORTH SMITH, *Assistant Instructor in Bacteriology.*
DR. J. C. ROPER, *Assistant Instructor in Histology.*

HISTOLOGY.

The work in this subject is conducted throughout the first and during a portion of the second year by laboratory exercises and by recitations. Laboratory exercises, in two two-hour sessions weekly during the first year, and one two-hour session weekly during the second year, occupy in all about 150 hours for each student. The work covers the construction and use of the microscope, the methods of preparing microscopical sections of tissues, and the normal histology of the various tissues and organs of the human body. Attention is constantly directed to the application of the knowledge to physiological phenomena, and to further this end the courses in physiology and histology proceed as far as possible in unison. When desirable the structure of human tissues

and organs is illustrated by sections of embryonal and lower vertebrate tissues.

In the first year the blood and simple tissues, the gastro-intestinal tract and adnexa, and the respiratory, circulatory, and genito-urinary organs are studied. In the second year the organs of the special senses and the nervous system are considered.

Recitations.—One recitation weekly for each student is held during the first year, and the first half of the second year, on subjects assigned from the text-book on histology. These recitations are designed to completely familiarize the student with the structure of the tissues considered during the previous week in the laboratory exercises.

An examination is held at the end of each year. The standing of the student in this, as in the other subjects, is determined equally from the work in the laboratory exercises and in the recitations.

PATHOLOGY.

The course of instruction in pathology in the second year comprises a preliminary course of lectures on the theory and classification of inflammations, which is designed to acquaint the student with the main facts in this field, to prepare him for preliminary studies in medicine and surgery, and to establish a uniform system of nomenclature to be used in this and other departments. During one half the second year, also, attendance is required at one weekly demonstration in gross pathology, at which the more common visceral lesions are exhibited. This course is designed to accompany the preliminary recitations in medicine and surgery of the second year.

The main branches of the subject are grouped in the third year in order to secure the simultaneous study of the gross and microscopical changes in diseased tissues. In the fourth year the students perform autopsies, and attend one recitation weekly in review of the entire subject.

Microscopical Demonstrations in Pathology.—The microscopical demonstrations occupy three two-hour sessions weekly throughout the year, in all about 175 hours, and they constitute the main feature of the instruction in this department. The specimens studied illustrate the topics of inflammation, tumors, autointoxications, infectious diseases, and diseases of the nervous system, and are supplemented by lectures, and special demonstrations by means of sections, charts, lantern slides, and micro-photographs.

Demonstrations in Gross Pathology.—On the days alternating with the microscopical studies demonstrations of gross pathological specimens are given to the students of the third year, with the material collected from autopsies. With the viscera of each case is presented an epitome of the clinical history, and, when necessary, frozen sections of the organs, and the clinical symptoms are explained from the gross and microscopical changes in the altered tissues. The student here sees the viscera of many of the fatal cases which he has studied in the wards of the hospital.

Gross pathological diagnosis is taught as a separate branch of this subject, not bearing directly on the clinical aspect of the case.

These demonstrations occupy three two-hour sessions weekly, each section of the class attending one exercise weekly throughout the year.

Post-Mortem Examinations.—Students of the fourth year are required to perform autopsies under the direction of the instructor in gross pathology, when they are made familiar with the technical procedures required in ordinary and in medico-legal cases.

Recitations.—One recitation weekly is required of each student throughout the third and fourth years. In the third year they cover the work of each preceding week. In the fourth year they cover the entire work of the department.

BACTERIOLOGY.

The laboratory course in bacteriology occupies three two-hour sessions each week for one-half of the second year—in all, ninety hours

for each student. The student is first made familiar with the methods of disinfection, and is required to prepare the ordinary culture media. The work then proceeds to the methods of staining and examining bacteria; their artificial cultivation and the study of biological characters; the methods employed in the separation of species; the general relation of pathogenic bacteria to disease; and concludes with the biological analysis of air, water, soil, and milk. Cultures are made from the viscera of cases of the various infectious diseases, and the student is required to cultivate and identify the important pathogenic micro-organisms. The work is supplemented when necessary by the use of pure cultures, by the exhibition of anærobic cultures, and to a limited extent by inoculation in animals.

An Advanced Course in bacteriology is offered to those students who have been able in the first year to attend the course required in the second year.

This course includes the cultivation of other pathogenic micro-organisms, the separation of species, and the bacteriological examination of viscera secured at autopsies.

Advanced Courses and Original Research.—The abundant facilities of the laboratory on the fourth floor of the new building can be offered to properly qualified students and practitioners of medicine who wish to pursue advanced courses of study on lines of original research, under the direction of special instructors.

SPECIAL DEPARTMENTS OF MEDICINE AND SURGERY.

DISEASES OF CHILDREN.

JOSEPH E. WINTERS, M.D., *Professor of Diseases of Children.*

Instructors,

DR. WALTER A. DUNCKEL, DR. WILLIAM SHANNON.

Assistants,

DR. ROBERT S. ADAMS, DR. HORACE S. STOKES,
DR. SAMUEL M. EVANS, DR. LESTER M. HUBBY.

This department will embrace clinical instruction and section teaching in all the important diseases of infancy and childhood.

There will be one clinical lecture each week in the college building, and clinical lectures in the Willard-Parker Hospital on scarlet fever and diphtheria.

In connection with the dispensary of the Children's Department in the college building there will be an amphitheatre for section teaching and isolation rooms for contagious diseases, so that students will have ample opportunity for the personal study of disease.

Two hours each week will be devoted to section teaching in the dispensary to the students of the fourth year.

Students will be required to examine sick children and discuss the diagnosis and treatment of patients assigned to them.

Special attention is given to the hygiene and feeding of infants; the digestive disorders of infants; the dietetics of childhood and the food disorders of infancy and childhood; the anatomical and physi-

ological peculiarities of infancy and childhood; and the influence these peculiarities have on the manifestations of disease in children.

One of the distinguishing features of this department will be the instruction of each student in the art of diagnosis, by the professor in charge.

There will be practical bedside illustrations of the management, care, and therapeutics of all the acute diseases of infancy and childhood.

In the clinical laboratory microscopical examinations will be made of secretions and excretions, of lesions of the mouth and throat, and of sections of anatomical lesions of the important diseases of childhood.

SURGICAL DISEASES OF THE GENITO-URINARY ORGANS.

Samuel Alexander, M.D., *Professor of Genito-Urinary Surgery.*

Instructors,

Dr. F. E. Shine, Dr. Newton B. Waller,
Dr. M. J. Echeverria.

The course is required of students during the third and fourth years, and is designed to give instruction in diagnosis and treatment of the surgical diseases of the male genital and urinary organs and in syphilis. It consists in recitations, lectures, clinics, and section work in the dispensary of the college and in the wards of Bellevue Hospital.

Recitations.—Recitations are held during the third and fourth years by the instructors in the department of general surgery.

Lectures.—One lecture a week from the opening of the term to the first of December will be given by Professor Alexander at the college. These lectures will be principally devoted to the subject of syphilis. A syllabus of these lectures will be furnished to each member of the class.

Clinic.—A clinic will be given in the amphitheatre of Bellevue

Hospital once each week after the first of January by Professor Alexander. At this clinic the principal operations upon the male urinary and genital organs will be performed before the class, and special attention will be given to the subject of diagnosis and post-operative management of cases. Attendance upon these clinics is required by students during the third and fourth years.

Section Teaching at the College Dispensary and at Bellevue Hospital.—The third-year class will be divided into sections of small size, and instruction will be given by the Chief of Clinic and the instructors in the college dispensary. Special attention will be given in this course to the diagnosis and treatment of the venereal diseases and the use of special instruments.

The fourth-year class will be divided into sections of small size, and instruction will be given in the wards of Bellevue Hospital or in the college dispensary by Professor Alexander or the Chief of Clinic. This course will be devoted principally to the diseases of the urinary organs and to instruction in the use of special instruments and apparatus and the post-operative treatment of cases.

NERVOUS DISEASES.

CHARLES L. DANA, M.D.,
Professor of Diseases of the Nervous System.

Instructor,
DR. JOSEPH FRAENKEL.

Assistants,
DR. ROBERT M. DALEY, DR. J. RAMSAY HUNT.

The regular work consists of a preliminary series of lectures by Professor Dana, in which the general outline of the work for the year is given, with demonstrations of the general anatomy, general symptomatology, and methods of examination of the nervous system. During the rest of the term clinical lectures on nervous diseases are

held weekly in the amphitheatre of Bellevue Hospital or at the college. Section work is given weekly to classes in the wards of Bellevue Hospital, and three times a week in the dispensary of the college. In this dispensary, section-work instruction is given in history-taking in the examination of patients, and in electro-therapeutics.

It is considered of the greatest importance that the student of nervous diseases be thoroughly grounded in the anatomy and physiology of the nervous system, therefore courses in gross and microscopical anatomy of the nervous system are provided in the histological laboratory. Special students can also take courses on the pathology of the nervous system.

Thus the course of instruction aims to provide the student before he graduates with instruction in the microscopical anatomy of the nervous system, in its physiology and pathology, and also that he shall receive practical clinical instruction in the amphitheatre, at the bedside, and in the dispensary.

MENTAL DISEASES.

ALLAN MCLANE HAMILTON, M.D., F.R.S.E.,
Professor of Mental Diseases.

Instructor,

DR. WILLIAM HIRSCH.

Assistant,

DR. GEORGE DE FOREST SMITH.

The Professor of Mental Diseases and Dr. Hirsch will give a series of clinical and didactic lectures once a week for two months, fully illustrated. Clinics will also be given at the Manhattan State Hospital on Ward's Island during the course.

Instruction will also be given in diagnosis, the legal commitment of the insane, and the relations of insanity to medical jurisprudence.

DERMATOLOGY.

GEORGE T. ELLIOT, M.D., *Professor of Dermatology.*

Instructors,

DR. THURSTON G. LUSK, DR. JAMES C. JOHNSTON.

Instruction in Dermatology will be given by the clinical professor and his assistants. No teaching will be given didactically, but the cutaneous diseases will be demonstrated on the living subject. Abundance of material for such instruction is obtainable, and the student can thoroughly familiarize himself with the more common as well as with the rarer diseases of the skin by actual personal contact and observation. Attention is particularly paid to the diagnosis and the etiology of skin diseases, but their therapeutics also receive due consideration.

LARYNGOLOGY AND RHINOLOGY.

CHARLES H. KNIGHT, M.D., *Professor of Laryngology.*

Instructor,

DR. JAMES E. NEWCOMB.

Assistants,

DR. FRANK T. BURKE, DR. EDWARD J. CONNELL,
DR. CHARLES MACK, DR. CARL ANSON CLEMONS.

Instruction in Laryngology and Rhinology is given by clinical lectures at the college by the professor of the department. The subjects then considered are demonstrated to the fourth-year students by the instructor and by the assistants. The class is divided into sections, and each member is expected to examine patients and perform manipulations. The clinics are fully illustrated by plates and models, and, as far as possible, by clinical material.

OPHTHALMOLOGY.

CHARLES STEDMAN BULL, M.D., *Professor of Ophthalmology.*

Instructors,

DR. ROBERT G. REESE, DR. ALEXANDER DUANE.

Instruction in Ophthalmology consists in lectures at the college building once a week, during the months of October, November, and December, and in sectional teaching two hours a week at the college dispensary throughout the year. The weekly lectures at the college are mainly didactic, and consider the subjects of physiological optics, the theory of the opthalmoscope, refraction and accommodation, the anomalies of the ocular muscles, and the deep lesions of the eye which are not susceptible of clinical demonstration. Thus the entire field of ophthalmology is covered. The sectional teaching at the college dispensary is devoted partly to clinical ophthalmology and the use of the ophthalmoscope, and partly to instruction in the errors of refraction and the rudiments of the fitting of lenses.

OTOLOGY.

GORHAM BACON, M.D., *Professor of Otology.*

Instructor,

DR. FRANKLIN M. STEPHENS.

Assistants,

DR. EARLE CONNER, DR. GEORGE SLOAN DIXON.

During the first third of the fourth year a systematic course of weekly lectures is given. These lectures are practical in character, including a consideration of the anatomy and physiology of the ear and the various methods of examination. Patients are shown to the

class in order to familiarize the students with the symptoms and character of the more important diseases.

For the fourth-year students, the class is divided into sections for clinical instruction in the dispensary. Each student receives practical instruction from Professor Bacon and his assistants in the examination of patients, the use of the otoscope, and the various methods of testing the hearing. The student is permitted to examine patients and, after a probationary period, to prescribe for them and thus gradually assume the duties of a clinical assistant. The students have also an opportunity of witnessing the more important operations in aural surgery, including intracranial complications.

ORTHOPÆDIC SURGERY.

NEWTON M. SHAFFER, M.D., *Professor of Orthopædic Surgery.*

Instructors,

DR. P. HENRY FITZHUGH, DR. JOHN MCGAW WOODBURY.

Assistants,

DR. HENRY SCOTT, DR. JAMES P. FISKE.

The course of study in the Orthopædic Department includes a stated clinical lecture once a week, with detailed demonstrations in sectional work twice a week during two months of the year.

During the regular clinical course especial attention is given to the early recognition of the deforming diseases of childhood, also to the symptomatology, pathology, and differential diagnosis of chronic and progressive deformities, including the mechanical and operative treatment.

In detail, the course consists of practical illustrations of methods of treatment, the apparatus used being thoroughly explained both in construction and in principle, attention being called to even minute points of construction and use. The operative side is fully dwelt upon, the indications for operative interference as an adjunct to the

mechanical work being demonstrated. Ample clinical material is provided, and models of conventional forms of apparatus are placed at the disposal of students.

In the section and laboratory work the student is required to assist in the management of selected cases, to familiarize himself with the various methods of treatment, to construct the simpler forms of apparatus, to secure a practical knowledge of the details of construction of the more complicated instruments, and to familiarize himself with the pathological conditions existing in the deformities of childhood.

DEPARTMENT OF HYGIENE.

WILLIAM R. WILLIAMS, M.D., *Lecturer.*

Instruction is given in this course to students of the fourth-year class by lectures and demonstrations one hour a week during half of the year.

The course is designed to enable physicians and health officers to cope with preventible disease.

The lectures treat of the hygienic relations of foods, water, clothing, schools, dwellings, and hospitals. Special attention is given to the prevention of infectious diseases by a study of their etiology and methods of transmission, and the subject of immunity. This part of the course supplements the work of the Department of Bacteriology. The hygienic aspects of marriage and heredity are also considered.

SUMMARY OF THE PLAN OF INSTRUCTION.

FIRST YEAR.

1. Anatomy. — One lecture and two recitations each week throughout the year.

Section demonstrations.—Two hours weekly until January, then one hour a week for the remainder of the session.

Dissection.—Three to five courses of four weeks each, ten or more hours weekly.

2. Physiology.—Three lectures, three recitations, and one demonstration each week, during the second half of the session.

3. Chemistry and Physics.—Two lectures each week and one recitation-lecture on physics. Recitations two hours each week on inorganic chemistry. Chemical laboratory four hours each week throughout the session.

4. Histology.—Recitations two hours and laboratory four hours each week throughout the year.

5. Electives.—*a*. Laboratory pharmacology. *b*. Physiological chemistry. *c*. Bacteriology. These courses are open to certain advanced students as described on page 46 of the announcement.

In the course of the session three written reviews are held in the subjects recited upon. The papers are examined by the professors of the respective branches.

SECOND YEAR.

1. Anatomy.—Surgical and regional anatomy. Three lectures weekly. Recitation one hour each week. One demonstration lecture weekly.

Section demonstrations.—One hour each week.

Embryology.—Six lectures on embryology during the month of January.

Dissection.—Two to four courses of four weeks each, ten or more hours weekly.

2. Physiology.—Recitations and demonstrations four hours each week during the first half and one review-recitation each week during the second half of the session. Three lectures a week during the first half of the session.

3. Organic and Physiological Chemistry.—Two lectures each week. Recitation once a week.

Laboratory organic and physiological chemistry. Two hours weekly until February, then four hours weekly until the end of the session.

4. Histology.—Recitation one hour weekly, and laboratory work two hours weekly, throughout the session.

5. Pathology.—Ten lectures at the beginning of the year.

6. Gross Pathology.—One demonstration weekly for half the year.

7. Pharmacology.—Laboratory work six hours each week for half the session.

8. Medicine.—Recitation one hour weekly.

Physical diagnosis.—Three hours weekly for four weeks.

9. Surgery.—Recitations two hours weekly.

10. Obstetrics.—One weekly recitation. Six obstetric clinics (optional).

11. Bacteriology.—Laboratory work six hours each week for one-half of the session.

12. Electives.—*a*. Bacteriology. *b*. Materia medica recitations of the third year. *c*. Manikin course in obstetrics. *d*. Obstetrical clinic.

The conditions under which certain students may avail themselves of these electives are stated on page 47 of the announcement.

The study of the following branches is completed during the second year, and the examinations on them are final: (1) Anatomy

(2) Chemistry and Physics; (3) Pharmacology; (4) Physiology; (5) Bacteriology.

THIRD YEAR.

1. Medicine.—Recitations two hours each week. Physical diagnosis to sections in the dispensary. General medical diagnosis to sections at the bedside. General medical clinics two hours each week in Bellevue Hospital. Ward visits with the Professor and Clinical Professors of Medicine in Bellevue Hospital. Eighteen lectures on Symptomatology.

Clinical Pathology (chemical and microscopical).—Twenty-five laboratory exercises of two hours each.

2. Pathology.—Laboratory work six hours and recitations one hour weekly throughout the year.

3. Gross Pathology.—One demonstration weekly throughout the year.

4. Materia Medica.—Recitations two hours each week.

5. Therapeutics.—Lectures once each week until January, then twice a week for the remainder of the term; one hour a week bedside teaching in Bellevue Hospital throughout the year. Clinic once a week.

6. Obstetrics.—One illustrative lecture weekly. One recitation weekly. One clinic weekly.

7. Gynæcology.—Clinic once a week. Lectures, six at the beginning of the year.

8. Surgery.—Lectures, thirty hours. General surgical clinics, two each week. Bedside teaching, diagnosis, and history-taking in Bellevue Hospital. Clinics for diagnosis. Ward work in Bellevue and other hospitals and dispensaries, with the Professor and Clinical Professors of Surgery. Recitations on regional surgery two hours weekly.

9. Toxicology.—Lecture one hour each week for twenty weeks.

10. Diseases of Children.—Clinic one hour each week.

11. Genito-Urinary Surgery.—Clinic once a week after January 1st.

12. Neurology.—Lectures once a week for the first five weeks. Clinic once a week for the following twenty weeks.

Dispensary teaching in one-hour periods three times a week for four weeks.

FOURTH YEAR.

1. Medicine.—Ward work in Bellevue, Presbyterian, and Hudson Street hospitals. General medical clinics twice a week in Bellevue Hospital and once a week in dispensary. Exercises in history-taking and in clinical microscopy continued. Twelve lectures. Recitations, conferences.

2. Surgery.—Ward work in Bellevue, New York, Gouverneur, and other hospitals. General surgical clinics twice a week. Clinics for diagnosis. Section work and clinics in the special branches. Operative surgery. Recitations.

3. Therapeutics.—Lectures one hour a week. Recitation once a week. Clinical instruction in Bellevue Hospital. Section work in the college dispensary in the treatment of diseases and in the writing of prescriptions.

4. Obstetrics.—Lectures one hour a week. Attendance upon cases of confinement. Manikin practice and section work. One obstetric clinic weekly. Recitations.

5. Pathology.—One review recitation a week.

6. Technique of Autopsies.—One exercise a week for a portion of the year.

7. Gynæcology.—Clinic one hour each week and ward demonstrations two hours each week. Recitations.

8. Diseases of Children.—Section teaching two hours each week. Clinic one hour each week. Clinical pathology.

9. Genito-Urinary Surgery.—Lectures one hour a week during half of the term. Clinic one hour a week after January 1st. Section work twice a week throughout the session.

10. Neurology.—Twenty clinics. Section work one hour a week in Bellevue Hospital and in the college dispensary.

11. Mental Diseases.—Twelve lectures. Clinics once a week for four months.

12. Dermatology.—Section work.

13. Laryngology and Rhinology.—Fifteen lectures. Section work.

14. Ophthalmology.—Ten lectures. Section work.

15. Otology.—Nine lectures. Section work.

16. Physiology.—Two lectures a week during the first five weeks of the session on the physiology of the special senses.

17. Orthopædic Surgery.—Fifteen lectures. Section work.

18. Hygiene.—One lecture a week for half of the year.

EXAMINATIONS.

REQUIREMENTS FOR ADVANCEMENT IN COURSE.

Students are advanced in course from one year to the next upon passing examinations in the work of that year. As in the academic department of the University, the work of each year is considered final of itself. There is no unnecessary repetition of subjects taught from year to year. Students who have not succeeded in passing all their examinations will be allowed to enter upon the next year's studies, provided they pass examinations in the subjects failed in at the beginning of the session.

Examinations for advancement in course, graduation, and admission to advanced standing are held at the close of the year on the work of the year. In each laboratory course extending through a part of the year only, the examination is held at the close of the course.

Examinations for conditioned students and those desiring admission to advanced standing, who have not taken the spring examinations, are held during the first fortnight of the fall term.

The subjects examined upon are divided into major and minor subjects, and a standing of 75 per cent. is required to pass.

The minor subjects embrace laboratory courses and those in which instruction is given by recitations only.

Subjects of Examination for Admission to the Second Year.

Major Subjects..Anatomy (except the nervous system, viscera, and organs of special sense).
Physics.

Inorganic Chemistry.
Physiology (except the nervous system and organs of special sense).
Minor Subjects.. Histology (except the nervous system and organs of special sense).
Laboratory Inorganic Chemistry.

Conditions allowed (at the spring examinations): 1 Major and 1 Minor; or 2 Minor.

NOTE 1. In each of the laboratory courses of the first and subsequent years, students whose marks fall below a certain percentage will be allowed one reëxamination within two weeks of the completion of the course, failing in which they must repeat the laboratory course with the next succeeding section.

Students whose marks fall below this percentage in the chemical laboratory cannot be reëxamined, but must repeat the course with the next succeeding section.

NOTE 2. In each of those branches in which recitations are held throughout the year, there shall be a written review conducted by the instructors and supervised by the professor in charge of the department, and also a final written review conducted by the professor himself at the close of the year. The written reviews conducted by the instructors shall be held as soon as possible after the return from the Christmas recess, and shall count as a single recitation, the object being to ascertain the knowledge acquired by the student.

NOTE 3. *All conditions must be successfully passed before entrance into the next succeeding year will be allowed.*

Subjects of Examination for Admission to the Third Year.

Major Subjects.. Anatomy.
Organic Chemistry.
Physiology.
Minor Subjects.. Medicine.
Surgery.
Obstetrics.

Bacteriology.
Normal Histology (central nervous system and organs of special sense).
Pharmacology.
Laboratory Organic Chemistry.

Conditions allowed: 1 Major and 1 Minor; or 2 Minor subjects.

(See Notes 1, 2, and 3, page 90.)

Subjects of Examination for Admission to the Fourth Year.

Major Subjects.. Materia Medica.
Toxicology.
Pathology.

Minor Subjects.. Obstetrics and Gynæcology.
Medicine.
Surgery.
Clinical Pathology.
Pediatrics. } Clinical Paper.
Neurology. }
Gross Pathology.

Conditions allowed: 1 Major and 1 Minor; or 2 Minor.

(See Notes 1, 2, and 3, page 90.)

Subjects of Examination for Graduation at the End of the Fourth Year.

Medicine.
Surgery.
Obstetrics and Gynæcology.

Special Subjects:	Therapeutics.	
	Hygiene.	Clinical Paper.
	Ophthalmology.	
	Neurology.	
	Laryngology and Rhinology.	Clinical Paper.
	Orthopædics.	
	Pediatrics.	
	Pathology (General).	
	Mental Diseases.	Clinical Paper.
	Otology.	
	Dermatology.	

Students conditioned in only one subject at the end of the fourth year will be given an opportunity to make up the condition within two weeks. If the second examination is satisfactory the degree may be conferred at the Commencement at Ithaca.

Those conditioned in more than one subject or who fail to pass in the second examination just mentioned must repeat the work of the fourth year.

REQUIREMENTS FOR GRADUATION.

1. Candidates for the degree of doctor of medicine must have studied medicine for four full years in an accredited medical college, and the fourth year at least must have been spent in the Cornell University Medical College.

2. Candidates must present satisfactory evidence of good moral character and of being not less than twenty-one years of age.

3. Candidates must file with the Secretary of the Faculty the Regents' medical-student certificate as evidence of having complied with the requirements for admission. (Before entering the first year at least 36 counts must have been obtained; before entering the second year the full certificate of 48 counts must be filed with the Secretary.)

4. Candidates must have dissected at least seven parts in anatomy

(see page 52). They must, further, have taken the regular course of two weeks in practical obstetrics.

5. In addition to the yearly examinations above specified for advancement in course, candidates must pass at the end of the fourth year examinations in medicine, surgery, therapeutics, obstetrics, and gynæcology, and the special branches as are specified on pages 91–92.

6. Candidates rejected at the final examination will not be re-examined until after having repeated their fourth year of study.

Before being readmitted to the fourth year the candidate must pass a satisfactory examination in anatomy, physiology, chemistry and physics, and materia medica.

7. The degree will not be conferred upon any candidate who absents himself from the public Commencement without the special permission of the Faculty.

8. The Faculty reserves the right to terminate the connection of any student with the institution *at any time* on the ground of what they may deem moral or mental unfitness for the profession, or improper conduct while connected with the College.

REQUIREMENTS FOR LICENSE TO PRACTICE MEDICINE IN THE STATE OF NEW YORK.

All requirements for admission should be filed at least one week before examination.—They are as follows:

1. Evidence that applicant is more than twenty-one years of age (Form 1).

2. Certificate of moral character from not less than two physicians in good standing (Form 1).

3. Evidence that applicant has the general education required preliminary to receiving the degree of bachelor or doctor of medicine in this State (medical-student certificate. See examination handbook).

4. Evidence that applicant has studied medicine not less than

four full school years of at least nine months each, in four different calendar years, in a medical school registered as maintaining at the time a satisfactory standard. New York medical schools and New York medical students shall not be discriminated against by the registration of any medical school out of the State, whose minimum graduation standard is less than that fixed by statute for New York medical schools.

First exemption: "The Regents may in their discretion accept as the equivalent for any part of the third and fourth requirement, evidence of five or more years' practice of medicine, provided that such substitution be specified in the license."

5. Evidence that applicant "has received the degree of bachelor or doctor of medicine from some registered medical school, or a diploma or license conferring full right to practise medicine in some foreign country" (Form 3 of original credentials).

6. The candidate must pass examinations in anatomy, physiology and hygiene, chemistry, surgery, obstetrics, pathology and diagnosis, therapeutics, practice, and materia medica. The questions "shall be the same for all candidates, except that in therapeutics, practice, and materia medica all the questions submitted to any candidate shall be chosen from those prepared by the board selected by that candidate, and shall be in harmony with the tenets of that school as determined by its State Board of Medical Examiners."

Second exemption: "Applicants examined and licensed by other State examining boards registered by the Regents as maintaining standards not lower than those provided by this article, and applicants who matriculated in a New York State medical school before June 5, 1890, and who received the degree of M.D. from a registered medical school before August 1, 1895, may, without further examination, on payment of $10 to the Regents, and on submitting such evidence as they may require, receive from them an indorsement of their licenses or diplomas, conferring all rights and privileges of a Regents' license issued after examination."

7. A fee of $25 payable in advance.

FINAL EXAMINATION IN THE SUBJECTS OF THE FIRST AND SECOND YEARS.

A law passed at the last session of the legislature permits students to take part of their examinations for the license to practise medicine in this State at the end of the second year.

For the full text of the law see page 38, this catalogue.

Diplomas of Licentiate of the Royal College of Physicians of London and Membership of the Royal College of Surgeons of England.

Graduates of the Cornell University Medical College are admitted to the final examination for the diploma of Licentiate of the Royal College of Physicians of London and Membership of the Royal College of Surgeons of England, upon presenting proper certificates that certain conditions applicable to the foreign universities and colleges which are recognized by the examining board have been complied with.

Further information may be obtained from the Secretary of the Board (Mr. F. G. Hallett) at the Examination Hall, Victoria Embankment, London, W. C.

PRIZES.

The Harriet Crocker Alexander prizes, the first of $150, the second of $50, are awarded, the first to the student having the highest record, and the second to the student having the next highest record in the graduating class.

A friend of the college, whose name is withheld by request, has entrusted to the Dean enough money to increase this second prize to $100, and to add a third prize of $50.

HOSPITAL APPOINTMENTS.

The students and graduates of the Cornell University Medical College are entitled to compete on equal terms with those of other

colleges for positions on the resident staff of Bellevue and the other hospitals of the city.

Some of these hospitals are: The City, Harlem, Gouverneur, New York, St. Luke's, Presbyterian, St. Vincent's, St. Francis', Mount Sinai, German, and Hudson Street hospitals, New York Eye and Ear Infirmary, and the hospitals in Brooklyn and Jersey City, Newark, Paterson, etc.

The requirements, the times of examination, and the period of service differ. The details can be learned by application, written or in person, to the superintendents or to the secretaries of the medical boards of the various hospitals.

SUMMER SCHOOL.

The Medical Department will continue during the summer of 1902 the Summer School which has proved of so much advantage.

The courses are wholly laboratory, and are designed primarily for advanced students or for workers in specialized lines of research or for post graduates. They are scheduled to begin during the third week in May, and to continue about six weeks in order to terminate before the hottest weather. These courses include different portions of the subjects of normal histology; clinical, gross, and histological pathology; bacteriology, chemistry, anatomy, and operative surgery.

A pamphlet giving full details can be obtained by application to the Secretary of the college.

BOARD.

Board near the college may be obtained from $5 to $8 per week. Information may be obtained from the Clerk, at his office in the college, or from the Secretary of the Intercollegiate Young Men's Christian Association, 129 Lexington Avenue.

SUGGESTION.

It would be to the advantage of students if they would register a few days in advance of the opening exercises, secure boarding-places, and purchase books, so that their studies may not be interrupted in the beginning. The Clerk is in his office every day after September 1, *from* 10 A.M. *to* 2 P.M.

TEXT-BOOKS.

As a rule, only the latest editions of text-books should be purchased.

Anatomy—Text-Book, Gerrish, $6.50; Reference Works, Morris, $6.00; Gray, $5.50; Quain, $25.20; Haynes, *Guide to Dissection*, $0.80; Woolsey, *Surgical Anatomy;* Haynes, *Manual of Anatomy*, $2.50.

Bacteriology—Sternberg's *Manual of Bacteriology*, $4.50; Muir and Ritchie, *Manual of Bacteriology*, $3.25.

Chemistry—Witthaus, *Manual of Chemistry*, fifth edition, $3.25; Witthaus, *Laboratory Guide*, fourth edition, $1.00; Wolf, *Laboratory Handbook*, $1.25; Ganot's *Physics*, $5.00.

Dermatology—J. Nevins Hyde, $4.50.

Diseases of Children—Medical Diseases of Infancy and Childhood, Williams, $3.50; *An American Text-Book of the Diseases of Children*, Starr, $7.00.

Genito-Urinary—White and Martin, $6.00; Hyde and Montgomery, $4.00; Keyes and Chetwood, $2.75.

Gynæcology—Penrose, $3.75; Dudley, $5.00; Kelly, $15.00.

Histology—Stohr, *Text-Book of Histology*, $3.00; Bohm, Davidoff, and Huber, *Text-Book of Histology*, $3.50.

Hygiene—Treatise on Hygiene, Notter and Firth, $1.25.

Materia Medica and Therapeutics—White and Wilcox, *Materia Medica and Therapeutics*, $3.00; Coleman, *Syllabus of Materia*

Medica, $1.00; Hare, *Practical Therapeutics*, $4.00; Thompson, *Practical Dietetics*, $5.00.

Medicine—Musser, *Medical Diagnosis*, $6.00; Thompson's *Practical Medicine*, $5.00; for reference, Loomis-Thompson, *American System of Practical Medicine*, $24.00.

Mental Diseases—Regis, Berkley, *Mental Diseases*, $5.00; Tuke's *Dictionary of Psychological Medicine;* Hamilton and Godkin, *System of Legal Medicine.*

Nervous Diseases—Dana, $3.50; Gower, *Diseases of the Brain and the Spinal Cord*, $8.00; Dercum, $6.00; Obersteiner, *Anatomy of the Nervous System*, $5.50.

Obstetrics—Edgar's *Practice of Obstetrics*, $—; Jewett's *System of Obstetrics*, $5.00; Winckel, $5.00.

Ophthalmology—Noyes, $5.00; De Schweinitz, $4.00; Swanzy, $2.50; Jackson, $2.50; Suter, $1.50; Nettleship, $3.00.

Orthopædic Surgery—Bradford and Lovett, $4.50.

Otology—Bacon on the Ear, $2 25; Politzer, *Diseases of the Ear*, $7.00; Macewen, *Pyrogenic Infective Diseases of the Brain and Spinal Cord*, $4.00.

Pathology—Delafield and Prudden, *Pathological Anatomy and Histology*, $5.00; Orth, *Pathological Diagnosis* (Trans. of Sydenham Society); Ziegler, *General Pathology*, $5.00.

Clinical Diagnosis—V. Jaksch, $6.50; Simon, $3.75; *Pathology of the Blood*, Ewing, $3.50.

Physiology—Kirke's *Hand-Book of Physiology*, seventeenth edition, Halliburton, 1901, $3.00; Flint, $4.80; Stewart, $3.75; Foster, $3.60; Landois.

Surgery—Tillman, 3 vols., $15.00; *American Text-Book*, $7.00; Parks, *Surgery*, $6.00; Stimson, *Fractures and Dislocations*, $5.00; Stimson, *Operative Surgery*, $3.00; Dennis, *System of Surgery*, $6.00 per volume.

Gould, *Student's Medical Dictionary*, $2.50.

Dissecting Cases—$2.00 to $5.00.

Text-books, etc., may be obtained from the Clerk at the college.



MEDICAL BUILDING.
CORNELL UNIVERSITY.
W. H. MILLER. ARCHT.,
ITHACA N. Y.

INSTRUCTION AT ITHACA.

During the First Two Years of the Course.

CALENDAR FOR ITHACA.

First Term, 1902–1903.

September 23d, Tuesday.—Academic year begins; matriculation of new students; University scholarship examinations begin.
September 24th, Wednesday.—Matriculation of new students.
September 25th, Thursday.—Registration of matriculated students.
September 26th, Friday.—Instruction begins in all departments of the University at Ithaca. President's annual address to students at 12 M.
December 24th, Wednesday.—Christmas recess begins.
January 6th, Tuesday.—Work resumed.
January 11th.—Founder's Day.
January 30th, Friday.—First term closes.

Second Term.

February 2d, Monday.—Registration for the second term.
April 4th, Friday.—Easter recess begins.
April 14th, Tuesday.—Work resumed.
June 11th, Thursday.—Instruction ends.
June 18th, Thursday.—Thirty-fifth annual commencement.

General Statement.

Upon the establishment of the Medical Department of Cornell University in 1898, in New York City, by action of the Board of

Trustees, it was resolved that the work of the first two years, consisting as it does mainly of fundamental scientific subjects, should also be given in Ithaca, where the opportunities offered by the long established departments of Botany, Zoölogy, Physics, Chemistry, Physiology, Histology, Embryology, and Bacteriology afford unusual advantages for thorough study. The remaining subjects of the first two years were also fully provided for.

Among the facilities of the University of special value to the Medical College may be mentioned the museums of Vertebrate and Invertebrate Zoölogy, including Entomology, Comparative Anatomy, of Agriculture, of Botany, and of Geology. The University Library, with its 250,000 bound volumes, 40,000 pamphlets, and 600 current periodicals and transactions, is likewise as freely open to medical students as to other University students.

Through the generosity of an anonymous giver, the University has been enabled to erect a building especially designed for anatomy, histology, embryology, and physiology. The building is constructed of Ohio sandstone, similar to the library and law school. The general form is that of an E, 160 feet long, with wings 40 feet square.

In the cellar are situated the cold-storage, embalming, and cremating rooms, a large room 40 feet square for aquaria, projection, etc., and store room.

In the basement is a room for the ventilating and cold-storage machinery, a recitation and a large lecture room, besides the lower part of the large amphitheatre.

On the first floor are located the cloak rooms for men and women, office, library, faculty room, museum, two recitation rooms, upper part of the large amphitheatre, and assembly room.

The second floor is devoted to the departments of histology and physiology, each with a large general laboratory, a research laboratory, preparation rooms, and private laboratories for the staff of instruction.

The third floor consists of the general and special dissecting rooms, study rooms, and amphitheatre, besides rooms for the staff.

The attic is utilized for photography, macerating the skeletons, and for storage.

The greatest pains have been taken for ventilation. The lighting, as shown by the accompanying picture, is almost perfect in all the rooms.

DEPARTMENTS, METHODS, AND FACILITIES.

ANATOMY.

Abram T. Kerr, B.S., M.D., *Assistant Professor.*
Augustus G. Pohlman, M.D., *Instructor.*
Benson A. Cohoe, B.A., M.B., *Instructor.*
William J. Abbott, B.A., M.B., *Instructor.*
Lawrence Hendee, M.D., *Assistant Demonstrator.*
J. Ralph Harris, M.D., *Assistant Demonstrator.*

The anatomy is given in both the first and second years. The work consists of section demonstrations and dissection, special attention being given to practical work in the laboratory. All the laboratory work is concentrated in the first half year. By thus enabling the student to devote a large amount of time continuously to the work, it is believed the best results are obtained.

During the first year, first half, thirty-five hours per week are devoted to laboratory work. The class is divided into three groups; one assigned to the dissection of the head and neck, one to the upper extremity, and one to the lower extremity. These, starting simultaneously in September, study the bones of their parts before taking up the dissection. Upon the satisfactory completion of one

part, the bones and dissection of another part are taken up in a similar way.

During the second year, first half, twenty-five hours per week are devoted to laboratory work. The student is expected to dissect the thoracic and abdominal viscera; assigned regions and special parts; upon completing these there will be an opportunity to repeat any of the required work, or to do original work. As the laboratory work in osteology and in dissection advances, the students are called from the laboratory in small groups for demonstrations upon the work which they have completed.

In the first year, a complete skeleton is loaned to each two students. During the two years, the student is required to make at least one complete dissection of the human body. The dissecting material is sufficient, thoroughly embalmed, and is kept in cold storage, so as to be ready for use when needed. The work is personal and practical, each student being independent of the others, so that those with special training or ability are in no way retarded by the slower members of the class. The object of the course is not only to teach the structure, connections, and relations of the parts of the body, but also to train the student in methods of scientific work, observation, and thought. The students are encouraged to make careful notes and drawings, and to record all variations from their text-book descriptions. For this purpose they are furnished with outline record charts.

In addition to the laboratory work, there will be, during the second half year, two demonstrations per week to small sections of the class, on Topographical and Regional Anatomy. In these, special dissections will be shown to the students, and their attention called to the practical application of Anatomy to Medicine and Surgery. The structure, connections, and relations of the thoracic and abdominal viscera will be demonstrated twice a week to small sections.

Those who have satisfactorily completed the required work, and others properly qualified, will be given opportunity to do advanced and original work.

HISTOLOGY AND EMBRYOLOGY.

SIMON HENRY GAGE, B.S., *Professor.*
WILLIAM CROOKS THRO, A.M., *Instructor.*
WILLIAM ATWOOD HILTON, Ph.D., *Assistant.*
WILLIAM FREDERIC WISMAR, A.B., *Assistant.*
Assistant.
Assistant.
Assistant.

As indicated by the following courses, this department offers elementary and advanced instruction in the theory and use of the microscope and its accessories, in photo-micrography, in vertebrate histology, and vertebrate embryology; and opportunities for research in all of these subjects.

The material equipment consists of a good supply of modern microscopes, camera lucidas, polariscopes, micro-spectroscopes, photo-micrographic cameras, and other special apparatus are in sufficient numbers to give each student opportunity for personally learning to use them, and for applying them to any special study in which they are called for. The general and research laboratories are large and are equipped with microtomes, incubators, aquaria, etc. The collection of histologic and embryologic specimens is extensive and constantly increasing. Sets of typical specimens are available for study and comparison by the students.

The aim of the department is to bring the student into direct contact with the truths of nature, and hence, while there are lectures to give broad and general views, there is a large amount of laboratory work in which the facts are learned at first hand, and the methods and manipulations necessary for acquiring the facts are practised by each student. It is recognized that less ground can be covered in a given time in this way, but it is believed, and experience has confirmed the belief, that the intellectual independence and power to acquire knowledge direct from nature which is gained by this personal work is of far higher value than the facts and theories that might be

learned in the same time from books and lectures alone, or from specimens prepared by some other individual.

This lake region with its rich and varied fauna is especially favorable for investigations in the histology and embryology of all the main groups of vertebrates; and the proximity of the abattoirs in the city makes it possible to obtain material for the study of the development of the sheep, cow, and pig. The clinic and veterinary department supply material for the embryology of the cat and dog, so that the opportunities for research upon the development of the domestic animals are excellent. Every encouragement is given for the fullest utilization of these opportunities.

Microscopy.—The first two weeks of the course are given to a study of the theory and manipulation of the modern microscope and its accessories, the underlying principles involved in the preparation, mounting, and study of microscopic objects.

Histology.—This part of the course includes the study of the fine anatomy of man and of the domestic animals, and also the fundamental methods of histologic investigation and demonstration with the microscope.

Embryology.—This deals with the elements of the development of man and of the domestic animals. For ease of demonstrating segmentation, the formation of the germ layers and the organs, the amphibian egg is studied. Then follows a short study of the developing hen's egg to illustrate meroblastic segmentation and to make intelligible some of the phases of mammalian embryology. The main part of the course, however, is devoted to mammalian development. Gravid uteri are obtained from the abattoirs, and each student has the opportunity to dissect the placenta, fetal membranes, umbilical cord, and the fetus itself, demonstrating among other things the main features of the fetal circulation. For the microscopic study, the department is well supplied with complete series of embryos of the chick, pig, cat, calf, etc., and each student has for study four complete series representing the principal steps in histogenesis and the development of the organs.

PHYSIOLOGY AND NEUROLOGY.

BURT GREEN WILDER, B.S., M.D., *Professor.*
BERT BRENETTE STROUD, D.Sc., *Instructor.*
HUGH DANIEL REED, B.S., *Instructor.*

Of the three general courses given in this department, Physiology, Vertebrate Zoölogy, and Neurology, each covering about one-third of the first year, medical students take only the lectures of the first and third.

Physiology, Course 1.—Two lectures per week until the Christmas recess. The title of this course is employed in the absence of any single word fully indicating its scope. It really constitutes an introduction to the study of the structure, functions, and relationships of man and other vertebrates.

Since a large part of physiology is based upon experiments upon animals, there is given first an outline of the animal kingdom, with special reference to the forms commonly used by physiologists. The anthropoid apes (gorilla, chimpanzee, orang, and gibbons) are considered somewhat fully on account of their numerous resemblances to man, among others the arrangement of the cerebral fissures and the possession of the cecal appendix.

The study of function is begun with the biceps, the several uses of which are demonstrated upon apparatus and the living muscle. Special attention is paid to points not infrequently neglected, the combinations and counteractions of muscles and the economics of levers in the body. At least one lecture is devoted to each of the following topics: Human locomotion, ciliary action, and the mechanics of circulation and respiration. About one-half of the course is given to the development, structure, and functions of the nervous system and sense organs. Among the experiments are the action of the phrenic nerve, the relations of the vagus to respiration and cardiac inhibition, the behavior of the decerebrized frog, and the demonstration of the motor areas of the cerebral cortex.

The means of illustrating this course include a full-sized manikin, a complete set of the Auzoux models, a "phantom brain," other models, and apparatus and charts.

Neurology, Course 3.—Two lectures per week after the Easter recess. There are considered (*a*) the various modifications of the vertebrate brain; (*b*) the structure and peculiarities of the human brain; (*c*) the human cerebral fissures as criteria of zoölogic or racial affinity, as indexes of physical or mental quality or power, and as boundaries of the cortical areas recognized by Flechsig and others. During this course is given a demonstration of the methods of removing and preparing the human brain for the elucidation of morphologic points. For the illustration of this course there are numerous diagrams representing actual preparations of the brains of man and other vertebrates. The neurologic division of the museum comprises about 1,476 preparations, distributed as follows, in round numbers: Human adults, 402; human embryo and fetal, 207; apes and monkeys, 282; other mammals, 400; other vertebrates, 185.

In both courses the members of the class have at all times free access to the lecture room, where are kept standard manuals, treatises, and monographs.

Opportunities for research are offered, especially in respect to the heart and the brain.

COMPARATIVE PHYSIOLOGY.

Pierre Augustine Fish, D.Sc., D.V.M., *Assistant Professor.*
Charles Orville Waite Bunker, B.S., *Assistant.*
Bert Raymond Hoobler, B.S., *Assistant.*
Oscar Percy Johnston, A.B., *Assistant.*
Bert Raymond Wilbur, *Assistant.*
——— *Assistant.*

The instruction in this department is carried on by means of lectures, recitations, and practical work in the laboratory.

The lectures are illustrated by numerous lantern slides; practical demonstrations form a component part of the exercises wherever possible, and the relationship of physiology to practical medicine is thoroughly emphasized.

In the laboratory a few exercises are devoted to the physiology of the digestive processes and of the blood; the remainder of the work being devoted to the physiology of the nervous, muscular, and circulatory systems. The equipment includes kymographs, sphygmographs, sphygmometers, cardiographs, tambours, centrifuges, microscopes, and other apparatus essential for complete and satisfactory work.

Students are required to take notes, and to hand in their reports accompanied with the tracings and other data obtained from their experiments for inspection and correction.

MATERIA MEDICA.

Pierre Augustine Fish, D.Sc., D.V.M., *Assistant Professor.*
Charles Orville Waite Bunker, B.S., *Assistant.*
Bert Raymond Hoobler, B.S., *Assistant.*
Oscar Percy Johnston, A.B., *Assistant.*
Bert Raymond Wilbur, *Assistant.*
——— *Assistant.*

In this department the work required of medical students consists of a laboratory course only, to serve as an introduction to the lecture and clinical courses given in New York during the third and fourth years. The student is made familiar in this course with the physical and chemical properties of a selected number of drugs; incompatibilities are demonstrated, and the essentials of prescription-writing explained. A large assortment of crude drugs and many of their various preparations are available for examination.

The work in this course consists of the study of a selected group of inorganic drugs; the study of certain crude organic drugs and their official preparations; in making pharmaceutical preparations,

such as syrups, emulsions, spirits, liniments, tinctures, fluid extracts, extracts, ointments, pills, and others. Some exercises will also be devoted to the study of the direct physiological action of a few selected drugs upon some of the lower animals.

In their study the students are required to write concise notes of the physiological action of the drugs examined and to make tests of their incompatibility. In addition to this each student will have practical experience in writing and compounding prescriptions. The importance of a discriminating and accurate system for dispensing medicines is thoroughly emphasized.

PHYSICS.

Edward Leamington Nichols, B.S., Ph.D., *Professor.*
George Sylvanus Moler, A.B., B.M.E., *Assistant Professor.*
Ernest George Merritt, M.E., *Assistant Professor.*
Homer James Hotchkiss, A.M., M.M.E., *Instructor.*
John Sandford Shearer, B.S., Ph.D., *Instructor.*

The instruction in physics is by means of lectures throughout the year. In these lectures the general laws of mechanics and heat, electricity and magnetism, and sound and light are presented. The very large collection of lecture-room apparatus possessed by the department makes it possible to give experimental demonstrations of all important phenomena. The arrangements for experimental work are most complete. Ordinary illuminating gas, acetylene, oxygen and hydrogen, compressed air, water and steam, blast and vacuum are within easy reach, and electric currents from alternating and direct current dynamos and from storage batteries are available. A masonry pier 4 × 12 feet permits the use in the lecture room of delicate apparatus that could otherwise be used only in the laboratory. A small turbine on the lecture table furnishes power for a variety of experiments. Lanterns with lime or electric light are always ready for use when they can in any way aid a demonstration.

The required course (7) in physics for medical students consists of two lectures a week throughout the first year, and the reading of a text-book. Note-books prepared by members of the class are read and graded at frequent intervals. A longer course (2*b*), consisting of two lectures a week, two recitations a week, and one afternoon in the laboratory, is likewise open to medical students, and all those who can find the time to do so, are urged to take this course in place of the required work mentioned above. It should be chosen in preference to the latter by all who wish to prepare themselves for advanced work in the biological sciences. The lectures in this course are supplemented by thorough drill upon the principles of the science, and this, together with the laboratory practice, affords opportunity for a much more adequate knowledge than can be obtained from any course that consists solely of lectures.

During the second term the department offers a course in practical photography (Physics, 9 ; 2 hours), consisting of lectures and laboratory practice. This course is open to students of medicine under the conditions stated upon page 144 of the University Register.

CHEMISTRY.

GEORGE CHAPMAN CALDWELL, B.S., Ph.D.,
Professor of General Chemistry.
LOUIS MUNROE DENNIS, Ph.B., B.S.,
Professor of Inorganic and Analytical Chemistry.
JOSEPH ELLIS TREVOR, Ph.D.,
Professor of General Chemistry and Physical Chemistry.
WILLIAM RIDGELY ORNDORFF, A.B., Ph.D.,
Assistant Professor of Organic and Physiological Chemistry.
EMIL MONIN CHAMOT, B.S., Ph.D.,
Assistant Professor of Chemistry.

Instructors in Chemistry,
THEODORE WHITTLESEY, A.B., Ph.D.
HENRY ROSE JESSEL, B.S., Ph.D.

Assistants in Chemistry,

ARTHUR RENWICK MIDDLETON, A.B.
GEORGE HOWARD BURROWS, B.S.
JOSEPH HEYWOOD RUSSELL, A.B.
JAY EMERY ROOT, A.B.
ROY EDWARD FOWLER, B.S.
WILLIAM CHAUNCEY GEER, A.B.

Inorganic Chemistry.—The elements of Inorganic Chemistry are taught by lectures, laboratory work, and recitations from a text-book. Careful attention is given to the writing of chemical equations and to the solution of chemical problems. Experiments illustrating the principles discussed in the text-books are performed in the laboratory by each student.

Qualitative Analysis.—The qualitative analysis begins with the study of those reactions of the elements and their compounds which are used in their reduction. This is followed by the practical application of the knowledge thus gained to the analysis of unknown substances, both in the solid form and in solution.

Organic Chemistry, or the Chemistry of the Compounds of Carbon.—In this course the study of the typical compounds of carbon, their properties, reactions, and relations to each other, is taken up, especial attention being given to those organic compounds which are of physiological importance. The course consists of lectures and recitations, supplemented by frequent written examinations. The lectures are fully illustrated by experiments, specimens of the compounds considered, and charts.

Toxicological Chemistry.—This course is intended to serve as an introduction to the methods employed for the separation and identification of the common poisons.

Physiological Chemistry.—The work in this course comprises the study of the chemistry of the proteids, carbohydrates, and fats, and of the compounds found in the animal body which are of physiological and pathological importance. The method of instruc-

tion is by lectures, recitations, and laboratory work, with frequent written reviews. In the laboratory the student separates from the various animal fluids and organs the chemical compounds which they contain, studies their properties, reactions, and products of decomposition, and thus familiarizes himself with the methods of isolation and identification of these products.

The above courses in Chemistry are required of all students in medicine. Other advanced courses are open to properly qualified students in medicine, and especial facilities for research work in chemistry are at their disposal.

BACTERIOLOGY.

Veranus Alva Moore, B.S., M.D., *Professor.*

Samuel Howard Burnett, A.B., M.S., *Instructor.*
Gershom Franklin White, B.S., *Assistant.*
Arthur Gordon Ruggles, B.S.A., *Assistant.*

The instruction in Bacteriology is given by means of lectures, recitations, and laboratory work. The bacteriological laboratories are well supplied with the best modern apparatus. The student will, under proper supervision, prepare culture media, make cultures, and study the morphology of bacteria in both the fresh (living) condition and in stained cover-glass preparations. In fact, all of the technique necessary for a practical working knowledge in bacteriology will be carefully covered. The more important species of pathogenic bacteria will be studied. The special methods which are necessary for diagnosing such diseases as tuberculosis, anthrax, glanders, and diphtheria will receive careful attention. Disinfection, sterilization, the means by which pathogenic bacteria are disseminated, protective inoculation, and other kindred subjects will be considered.

GENERAL PATHOLOGY.

Veranus Alva Moore, B.S., M.D., *Professor.*
Samuel Howard Burnett, A.B., M.S., *Instructor.*
Gershom Franklin White, B.S., *Assistant.*
Arthur Gordon Ruggles, B.S.A., *Assistant.*

The course in pathology consists of lectures, recitations, and laboratory work in pathological histology. The student will also be given instruction in describing gross pathological specimens, but the major part of the work in the laboratory will consist in studying sections of diseased tissue and making drawings from the same. In this course it is expected that the student will become familiar with the terms used in morbid anatomy together with a definite knowledge of the more important changes found in inflammation and the various forms of infiltrations and degenerations.

SURGERY.

Luzerne Coville, B.S., M.D., *Lecturer on Surgery.*

Surgery.—Two hours weekly, throughout the year, lectures and recitations. The course is given to small sections, and is intended to familiarize the student with the principles of General Surgery and Pathology, and to ground him in the surgical diseases, tumors, and fractures, and the technique of operative asepsis and antisepsis, and of operations, dressings, and methods.

MEDICINE.

Paul Richard Brown, M.D., *Lecturer on Medicine.*

No didactic lectures are delivered, their place being taken by recitations from a standard text-book. Students also take up the

subject of normal physical diagnosis in the latter part of the course.

Recitations.—The study of medicine proper is begun with systematic recitations from Lockwood's *Practice of Medicine*, an elementary text-book. In these recitations the nomenclature, etiology, pathology, and symptomatology of typical cases of diseases are considered, the question of treatment not being taken up until the Junior year in New York.

Physical Diagnosis.—Toward the end of the second-year course of Medicine, Normal Physical Diagnosis of the chest is taught in twelve lessons, some abnormal cases being introduced for comparison. For the above work, the class will be divided into sections of about ten each.

OBSTETRICS.

Paul Richard Brown, M.D., *Lecturer on Obstetrics.*

Instruction in obstetrics consists mainly of recitations from a standard text-book, these recitations covering the anatomy of the internal genitalia and pelvis, ovulation, menstruation, signs of pregnancy, the physiology, mechanism, and clinical course of normal labor, and the care of mother and child during the puerperium. Whenever necessary, these recitations will be illustrated by plates, casts, and demonstrations upon the obstetric manikin, etc.

SCHEDULE AND SUMMARIZED STATEMENT.

In this schedule the Counts or University hours are given on the following basis: One recitation or lecture weekly for one term or half-year gives a credit of one; for laboratory work it requires two and one-half actual hours weekly for a term or half a year to secure a credit of one. In the courses of instruction following the schedule, the actual time required each week of the student at lectures, recitations, and laboratory work is stated.

SCHEDULE.

First Year.

Subject.	*No. of Course.*	*Hours of Credit.*	*Actual Hours per Week.*
FIRST TERM.			
Anatomy	1	13	32½
Physiology	1	1⅓	2
Physics	7	2	2
Chemistry	3	4	9
SECOND TERM.			
Histology	1	8	16
Neurology	3	1⅓	2
Physiology Lectures	21	3	3
Physiology Recitations	20	3	3
Physics	7	2	2
Qual. Chem. Anal.	8	2	6

Second Year.

FIRST TERM.			
Anatomy	2	10	25
Organic Chemistry	32	3	3
Toxicology	68	1	2½
Surgery	10	2	2
Pathology	40	4	8
Materia Medica	26	2	5
SECOND TERM.			
Anatomy	3	1	2
"	4	1	2
Physiology Lectures	21	1	1
Physiology Recitations	21a	2	2
Physiology Laboratory	22	2	5
Physiological Chemistry	40	2	2
" "	41	2	5
Bacteriology	43	6	12
Medicine	9	2	2
Surgery	10	2	2
Obstetrics	11	2	2

Junior Year.—For subjects, see page 86, as given in New York City.

Senior Year.—For subjects, see page 87, as given in New York City.

SUMMARY OF COURSES OF INSTRUCTION.

First Year.

1. Anatomy.—Laboratory work with section practicums and recitations, thirty-five actual hours weekly from September to February. The whole of Course I is required of first-year students in Medicine; for students in Arts the course may be divided. Assistant Professor Kerr, Instructors Pohlman, Cohoe, Abbott, and Assistant Demonstrators Hendee and Harris.

1. Microscopy, Histology, and Embryology.—Two lectures, two recitations, and twelve hours of laboratory work weekly for the second half-year. Professor Gage and Instructor Thro, Assistants Hilton and Wismar.

(The work in Microscopy begins February 2, and continues till February 14; the Histology begins February 16, and continues till April 25; the Embryology begins April 27, and continues till June 5.)

1. Physiology.—Two lectures weekly until the Christmas recess. Professor Wilder.

3. Neurology.—Two lectures weekly after Easter recess. Professor Wilder.

21. Physiology.—Three lectures each week, second half-year. T., Th., F. 10. Dr. Fish.

20a. Recitations in Physiology.—Three hours each week. Second half-year. Assistants Bunker, Hoobler, and Johnston.

2a. Experimental Physics.—Two lectures, with demonstrations, weekly throughout the year. Dr. Shearer.

3. Introductory Inorganic Chemistry.—Two lectures, two recitations, and five hours of laboratory work weekly. First half-year till Christmas recess. Professor Trevor and Dr. Jessel; Messrs. Burrows, Root, and Fowler.

8. Qualitative Analysis.—One lecture and five hours of laboratory work weekly. Second half-year. Professor Dennis and Dr. Whittelsey; Messrs. Middleton, Russell, and Geer.

SECOND YEAR.

2. Anatomy.—Laboratory work with section practicums and recitations twenty-five actual hours weekly. September to February. Assistant Professor Kerr, Instructors Pohlman, Cohoe, Abbott, Assistant Demonstrators Hendee, Harris. The whole of Course 2 is required of second-year students in Medicine; for students in Arts the course may be divided.

3. Topographical and Regional Anatomy.—Two section demonstrations weekly. February to June. Dr. Hendee. (Open to those students in Arts who have had Course 1.)

4. Thoracic and Abdominal Viscera.—Two section demonstrations weekly. February to June. Dr. Kerr.

6. Advanced and Research Work.—Laboratory work eight or more actual hours per week. Dr. Kerr.

4, 5, and 6. Advanced and Research Work in Microscopy, Histology, Embryology, and Cytology.—Laboratory work, eight or more hours per week, with seminary. Professor Gage.

21. Physiology.—The Functions of the Muscular and Nervous Systems and the Sense Organs. Three lectures each week. April 15 to June. Dr. Fish.

21a. Recitations in Physiology.—Two hours each week. Second half-year. Assistants Bunker, Hoobler, and Johnston.

22. Physiological Laboratory.—Five hours each week. Second half-year. Dr. Fish. Assistants Bunker, Hoobler, Johnston, and Wilbur.

24. Research and Advanced Work in Physiology.—(See University Register.)

32. Elementary Organic Chemistry.—Two lectures and one recitation weekly. First half-year. Assistant Professor Orndorff and Mr. Teeple.

40. Physiological Chemistry.—Two lectures or recitations weekly. Second half-year. Assistant Professor Orndorff, Mr. Teeple, and Mr. Russell.

41. Physiological Chemistry.—Five hours laboratory work weekly. Second half-year. Assistant Professor Orndorff, Mr. Teeple, and Mr. Russell.

68. Toxicological Chemistry.—Two and one half hours laboratory work weekly. First half-year. Dr. Chamot and Mr. Russell.

Special facilities are provided by the Chemical Department for *advanced and research* work in chemistry. For a description of these courses see the University Register, page 145.

26. Materia Medica and Pharmacy, Laboratory.—Five hours each week. First half-year. Dr. Fish. Assistants Bunker, Hoobler, Johnston, Wilbur.

28. Advanced and Research Work in Materia Medica.—(See University Register.)

40. Pathology.—Two lectures or recitations and six hours laboratory work each week. First half-year. Professor Moore, Instructor Burnett and Mr. ——. This course is open to students who have had or are taking Course 1 in Microscopy.

43. Bacteriology.—Two lectures and ten hours laboratory work each week. Second half-year. Professor Moore; Assistants White and Ruggles.

44. Research in Bacteriology.—Laboratory work with lectures and seminary throughout the year. Professor Moore and Mr. White. The course is designed for those wishing to undertake original investigation in Bacteriology preparatory to practical work in bacteriological lines, such as exists in health department laboratories. This course is open to students who have

taken Course 43 or its equivalent in some other university. Elementary chemistry and a reading knowledge of French and German are indispensable for successful work in this course.

45. Research in Pathology.—Laboratory work throughout the year. Professor Moore and Instructor Burnett. This course is open to students who have taken Course 40 and have taken or are taking Course 43, or the equivalent in some other university.

9. Medicine.—Two recitations weekly. Second half-year. Dr. Paul R. Brown.

10. Surgery.—One lecture and one recitation weekly throughout the year. Dr. Coville.

11. Obstetrics.—Two recitations weekly. Second half-year. Dr. Paul R. Brown.

THE A.B. AND M.D. DEGREES.

As a liberal education in the arts and sciences is of great advantage to prospective students of medicine, all who can are urged to take the freshman, sophomore, and junior years in the Academic Department at Ithaca. After the completion of these years in the Academic Department (in which all the work is elective), the student is permitted to elect, as the fourth year of his A.B. course, a year's work in the Medical Department at Ithaca. He may then take his fifth year of work—the second of the medical course—either in Ithaca or in New York, but he must take the last two years of the medical course in New York. In this way he will obtain the A.B. degree at the end of four years, and the M.D. at the end of seven years of study. This is possible, because the first two years of the medical course in New York are offered in duplicate at the University in Ithaca.

Students who have taken the A.B. degree, as above, will, if they have anticipated in the Academic Department scientific studies

prescribed in the medical course, be admitted to advanced standing in the Medical College in New York (see p. 39).

REQUIREMENTS FOR ADMISSION.

For admission to the Ithaca division of the Cornell University Medical College, a medical-student certificate issued by the Regents is required. (For details, see pages 27–38.) No student is admitted except at the beginning of the college year in September.

RESIDENCE AND REGISTRATION.

The college year is nine months long, extending from the last of September till about the middle of June, and is divided into two nearly equal terms. (For exact dates, see calendar on page 99.)

Residence in Ithaca is required of all students. For leave of absence during the session, application should be made to the Secretary, Dr. Kerr.

At the beginning of each term (September 24–25, 1901, and February 3, 1902) students must register with the University Registrar, Room 9A, Morrill Hall. After registration with the University Registrar, they must register with the Secretary of the Medical Faculty, Dr. Kerr, in Stimson Hall.

SCHOLARSHIPS. (See page 40.)

EXAMINATIONS.

Students are advanced in course from one year to the next upon passing examinations upon the work of that year. As in the academic department, the work of each year is considered final of itself. There is no unnecessary repetition of subjects taught from year to year. According to the usage of the other departments, the univer-

sity student found to be markedly deficient will be dropped from the college.

ADVANCEMENT FROM SECOND TO THIRD YEAR.

Upon the completion of the two years in Ithaca, the student must obtain from the Faculty a statement of all the work which he has done; and accompanying this statement must be a recommendation that he be allowed to register in the New York division. As a student is not advanced from one year to another in the New York division until all the work of the year is completed, a student from Ithaca cannot enter the third-year class in New York until the entire schedule of the first two years has been successfully completed. For removing any conditions, examinations are held at the beginning of the fall term, both in Ithaca and in New York City. The student is at liberty to take these examinations in Ithaca or in New York City. The examination on a subject in either place is final for that year. That is, the student will not be permitted to try an examination on a subject in Ithaca, and take advantage of the later date for the examination in New York to have a second examination on the same subject in the same autumn.

If a student is deficient in two or more subjects there is no objection to his taking the examination in one or more subjects in Ithaca, and the remaining ones in New York, the same autumn.

MEDICAL SOCIETY.

The Cornell Medical Society is a student organization. Meetings are held on Wednesday evenings of alternate weeks. At these, papers prepared by the members are read, followed by general discussion. The aim is to give mutual aid in gaining general and special medical knowledge, facility in conducting the exercises of the meetings, and in presenting papers and discussions in a clear and forcible manner before an audience.

TUITION AND LABORATORY FEES.

Tuition each year $150
Laboratory Fees to cover cost of material.

BOARD AND ROOMS.

The cost of living in Ithaca, including board, room, fuel, and lights, varies from $4 to $10 per week. By the formation of clubs, students are sometimes able to reduce their expenses to $3.50 per week for room and board, and occasionally to even less than that amount.

The cost for board, rent of furnished room, fuel and lights, in Sage College and Sage College Cottage, which are exclusively for women, varies from $5 to $6.50 a week. A student occupying alone one of the best rooms pays $6.50 a week. If two occupy such a room together, the price is $5.75. Those occupying less desirable rooms, with two in a room, pay $5 a week each. Both buildings are warmed by steam, lighted by electricity, and, in most cases, the sleeping apartment is separated from the study.

Letters of inquiry in regard to board and rooms at the Sage College and the Cottage should be addressed to Mr. G. F. Foote, Business Manager of Sage College, Ithaca, N. Y.

MATRICULANTS IN NEW YORK.

Abbott, Wilson Ruffin, B.Ph.....New York City.
Adler, David.....New York City.
Albones, Arthur William.....Frankfort, N. Y.
Amster, Julius Lewis.....New York City.
Aranow, Harry.....New York City.
Arnow, Isaac.....New York City.
Aronson, Harry.....Brooklyn, N. Y.
Auerbach, Julius.....New York City.
Backus, Harold Simeon.....Andover, Conn.
Bailey, Harold Capron.....Buffalo, N. Y.
Baldwin, Wesley Manning.....Brooklyn, N. Y.
Banker, Ernest Ensign.....Ft. Edwards, N. Y.
Barringer, Benjamin Stockwell, B.S.....New York City.
Beckary, Albert, Ph.G.....New York City.
Becker, Henry Clinton, Jr.....Clinton, Mass.
Benedict, Albert Newell.....Yonkers, N. Y.
Berliner, Leopold Henry.....New York City.
Bernfeld, Samuel Joachim.....New York City.
Bernstein, Abraham.....New York City.
Bliss, Theodore, A.B.....Troy, N. Y.
Bloch, Siegfried.....Brooklyn, N. Y.
Boettiger, Carl.....Long Island City, N. Y.
Bowen, Willis Elliot, Ph.G.....Churchville, N. Y.
Bozenhardt, William Frederick.....New York City.
Bradford, Stella Stevens, A.B.....Montclair, N. J.
Braun, Jacob.....New York City.
Broder, Charles.....New York City.
Brower, Jacob.....New York City.
Brown, Christopher William.....Brooklyn, N. Y.
Bucons, Louis.....New York City.
Bugbee, Alice Gates, A.B.....New York City.
Burns, Geoffrey Charles Henry.....New York City.

Canfield, Amos.....Van Etten, N. Y.
Carr, Hugh Holmes.....New York City.
Carter, Helen Louise.....Newark, N. J.
Ceasar, Abraham Louis.....New York City.
Chapin, Charles Willard.....Georgetown, N. Y.
Chasins, Charles Louis.....New York City.
Cifaldi, Alexis.....New York City.
Climenko, Hyman.....New York City.
Cohn, Julius.....New York City.
Coryell, Clarence Catlin.....Ithaca, N. Y.
Coyle, James Francis.....New York City.
Cudmore, John Homer.....New York City.
Cunniffe, Edward Rutherford.....Port Jervis, N. Y.
Cunningham, Modie, M.D.....Ensley, Ala.
Darbois, Edmund Otto.....Jersey City Heights, N. J.
Davidson, Louis Leopold.....New York City.
Demarest, Ruth.....Nyack, N. Y.
De Pasquale, James, A.B.....New York City.
de Varona, Joseph Leo.....New York City.
Dolan, Paul, A.B.....Pottsville, N. Y.
Doran, William Thomas.....New York City.
Dosh, Louis Philip.....Milford, Ia.
Doughty, Phebe Van Vlack, A.B., Pd.B.....Mattewan, N. J.
Druskin, Samuel Jerome, B.S.....New York City.
Dudley, Gerry Brown, A.B.....Ashmore, Ill.
Dutari, Aurelio Arturo, A.B.....New York City.
Dyer, Frank Merritt.....Binghamton, N. Y.
Eaton, Alvin Richard.....Elizabeth, N. J.
Edlich, Theodore Julius, Ph.G.....New York City.
Ehrlich, Simon.....New York City.
Epstein, Sigmund.....New York City.
Evans, William, M.D.....Westtown, N. Y.
Evans, William Charles.....Talcottville, Conn.
Evans, Willis J.....New York City.
Everett, Frederick, B.S.....Potsdam, N. Y.
Fallick, Morris.....New York City.
Farrell, Benjamin Peater.....Pittsfield, Mass.
Faust, John Wesley, B.S.....Poughkeepsie, N. Y.
Feldman, Samuel.....New York City.
Ferry, Perry Lawson.....Preble, Ind.

Fine, Abraham.....New York City.
Fincke, Harry Stark, Ph.G.....Long Island City, N. Y.
Fischbein, Elias.....New York City.
Fisher, Archie Max.....Spencer, N. Y.
Fisher, Carl DeWitt, Ph.B.....New York City.
Fisher, Karl William.....Elmira, N. Y.
Flynn, Frederick Laurence.....New York City.
Freedman, Louis.....New York City.
Freitag, John Daniel, Jr.....Brooklyn, N. Y.
Friedman, Edward Louis.....Brooklyn, N. Y.
Frink, Horace Westlake.....Hillsdale, N. Y.
Frisbie, Walter Seip.....Meriden, Conn.
Gannon, John Francis, A.B.....Providence, R. I.
Geddes, Susan Baker.....Newark, N. J.
Gershenson, Edward Harry.....New York City.
Gettinger, Joseph Herman.....New York City.
Ginsberg, Charles.....New York City.
Ginsburgh, Edward Lyon.....New York City.
Goldberg, Benjamin.....New York City.
Goldberg, Jacob Martin.....Brooklyn, N. Y.
Goldberg, Louis Philippe.....New York City.
Goldstein, Isidore.....New York City.
Goodman, Henry.....New York City.
Gordon, Charles Albert.....Brooklyn, N. Y.
Gould, Clark Sumner.....Walton, N. Y.
Green, Arthur Randolph.....Saratoga Springs, N. Y.
Greene, James Sonnet.....New York City.
Greenfield, Samuel.....New York City.
Gregory, Alice.....New York City.
Grossman, William, A.B.....New York City.
Haigh, Herbert.....New York City.
Hala, William.....New York City.
Hammer, William Jacob.....Elizabeth, N. J.
Hansen, Anthony Hans, A.B.....Norwich, N. Y.
Hayden, John Aloysius.....Brooklyn, N. Y.
Heim, John Alfred.....New York City.
Herrick, John Rutherford, B.A.....Peekskill, N. Y.
Hertz, Julius Jacob.....New York City.
Heuser, Gerhard William.....Brooklyn, N. Y.
Hildreth, Edward Raymond, A.B.....Bridgehampton, N. Y.

Hilkowich, Abe Maurice.....New York City.
Hills, Rollin.....New York City.
Hinz, William.....New York City.
Hirsch, Henry.....New York City.
Hitchcock, Ethel Olivia Hunter.....New York City.
Hoerle, Horace Poinier.....Ridgewood, N. J.
Holland, Gustave Peter.....New Haven, Conn.
Hollander, Samuel.....New York City.
Holt, Corliss Mason.....Fishkill-on-Hudson, N. Y.
Horowicz, Bruno Sigismund.....New York City.
Horowitz, Alfred Joseph.....New York City.
Hubbard, Robert Youngs.....Jefferson, N. Y.
Hubbell, Hiram Gaylord.....Stamford, N. Y.
Huntoon, Frank McElroy.....Newark, N. Y.
Hyman, Charles.....New York City.
Hyman, Samuel Max.....New York City.
Isaacs, Harry Ezekiel.....West Hoboken, N. J.
Jachnowitz, Maurice Arthur.....New York City.
Jagle, Elizabeth Carlisle.....Brooklyn, N. Y.
Janson, Christian William.....Brooklyn, N. Y.
Joachim, Henry.....Brooklyn, N. Y.
Johnson, Dwight Fenn.....Wolcott, N. Y.
Johnston, Harvey Isaac.....Ovid, N. Y.
Kanter, Joseph Barnett.....New York City.
Kasper, Gerard, Ph.G.....Brooklyn, N. Y.
Kern, James Valentine.....New York City.
Kerr, William Murray.....New York City.
Kleban, Hyman.....New York City.
Klein, Morris James.....New York City.
Kleinberg, Benjamin.....New York City.
Klinkowstein, Jacob Joshua.....New York City.
Knauss, Charles William.....New York City.
Koehler, Leopold Jacob.....New York City.
Kommel, Louis Moses.....New York City.
Laffer, Oscar.....New York City.
Lawrance, Elliot Wagstaff.....Rochester, N. Y.
Lazarus, David.....New York City.
Lesser, Louis.....New York City.
Levitas, George Max.....New York City.
Levy, Abraham Aaron.....New York City.

Lewis, George Rae.....Newark, N. J.
Licht, Louis Frederick, Ph.G.....Brooklyn, N. Y.
Liebergall, Joseph, B.S.....New York City.
Lipschitz, Julius Philip.....New York City.
Lippman, Thomas Charles, Ph.G.....Sag Harbor, N. Y.
London, Julius.....New York City.
Losee, Mace Anderson.....Livingstonville, N. Y.
Ludwig, Robert Francis, A.B.....Springfield, Mass.
Mabey, J. Corwin.....Montclair, N. J.
McCarthy, John William, A.B.....Holyoke, Mass.
McCarthy, Lawrence John.....Rockville, Conn.
Macdonald, Robert Stevenson.....Pictou, Ont.
McGavock, Edward Pointer, A.B., M.D.....Wytheville, Va.
McGlade, John Joseph.....New York City.
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COLLEGE BUILDING.

The Medical School and a Dispensary, each with a main entrance on First Avenue, are arranged as follows:

The basement is commodious, well lighted and ventilated, and contains the engines, boilers, dynamos, and ventilating machinery; the refrigerating and cold-storage plant, with the injecting and freezing rooms; a large room with lockers, and another for bicycles. Storerooms, including one for drugs; four rooms, including a small theatre and a workshop, for orthopædic surgery; toilet rooms and lavatories, and several rooms for the janitor of the building, are also found here. On the basement level, but outside of the building, is a large incinerating furnace for consuming all the refuse from the College.

The principal entrances to the building are on the *First Floor*. They open from First Avenue into vestibules, one leading to the main hall of the school, the other to the general waiting room of the dispensary, between which the large amphitheatre is situated.

The rooms of the Children's Department, which include an isolating room and a small theatre, are placed between the entrances, while around the waiting room of the dispensary are located the office for distributing patients, the pharmacy, rooms for the departments of surgery and medicine, waiting and dressing rooms, lavatories, and rooms for the Roentgen-ray and sterilizing apparatus.

Grouped around the main hall of the school on this floor are the council and faculty room, the office of the Dean, the secretary, and the clerk, a reading and recitation rooms.

Upon the *Second Floor*, the same general arrangement prevails. On the side of the dispensary there is a large waiting room, surrounded by rooms assigned respectively to the departments of genito-urinary diseases, diseases of the nervous system, of the skin, and of the ear, while covering the space at the middle front of the building are the rooms belonging to the departments of the eye and the throat, with a series of twenty dark stalls for the simultaneous examination

of as many patients by as many students. Small waiting and dressing rooms and lavatories for the convenience of the patients are also found on this floor. The upper part of the large amphitheatre, extending from the floor below, occupies the centre of the rear half of this floor. The remainder of the floor is given up to the school. Here is found a hall, around which are grouped recitation rooms and laboratories for clinical pathology. These laboratories have convenient access from the dispensary, permitting ready coöperation in the work carried on there.

The *Third Floor* of the building is given up to teaching space, excepting an area upon the "dispensary side" of the building, which is assigned to the departments of gynæcology and obstetrics. This comprises a small theatre, examining, waiting, dressing, and toilet rooms, manikin, and two recitation rooms. The remainder of this floor is occupied by two amphitheatres (each having a seating capacity of about 175 students); one for anatomy, physiology, and pathology, the other for chemistry; attached to each are preparation and research rooms. The chemical laboratories also occupy this floor, including the main laboratory, the laboratory for physiological chemistry, rooms for apparatus, etc., and a library of chemistry.

There is the usual hall and corridor space with toilet rooms and lavatories.

The *Fourth Floor* is occupied by the upper part of the two amphitheatres which project from the floor below. The department of pathology and bacteriology occupies the remainder of this floor. Ample facilities are provided, not only for the class work and demonstrations, but for special and advanced courses and investigations. A library of pathology and bacteriology is situated here.

The *Fifth Floor* is devoted to the department of practical anatomy. The main dissecting room occupies a space of 160 by 55 feet; there is also a large room, 40 by 50 feet, which is set apart for advanced undergraduates and post-graduates. These rooms can be cooled by the refrigerating plant in such a manner as to permit the pursuit of practical anatomy with as much comfort in summer as in winter.

This floor presents such facilities as lockers for 300 students, a small demonstration theatre with prosecting and cold-storage room attached, private dissecting rooms, a bone room, a library, a reading and study room, and a commodious room for instruction in operative surgery.

The department of photography, the animal house, and a room

for the preparation of bones are placed in a half-story at the top and rear of the building.

There are two main staircases, one for each department of the building, passenger elevators, and a freight lift.

The building itself is fireproof throughout, being constructed of steel, stone, brick, marble, and tile. The glazed brick and glazed tile walls, tile floors, and enamel painted cast-iron trim to the doors and interior of the windows ensure cleanliness. Special attention has also been paid to the problems of refrigeration, lighting, heating, and ventilation, so that every part of the structure can be easily kept at all times in an agreeable and sanitary condition.

In conjunction with this building the Loomis Laboratory will be employed in the manner already set forth.

CORNELL UNIVERSITY

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The COLLEGE OF LAW (Degree LL. B.)

The MEDICAL COLLEGE* (Degree M. D.)

The NEW YORK STATE VETERINARY COLLEGE (Degree D. V. M.)

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*The full four-year course of the CORNELL UNIVERSITY MEDICAL COLLEGE is given in the City of New York, but the first half of it—the work of the first and second years—is also given at Ithaca, where it may be taken by men students and where alone it can be taken by women students (for whom a home is provided in the Sage College for Women). Both men and women students must take the last two years of the course in New York City. Special announcements of the Medical College and information of every kind regarding it will be furnished on application to

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CORNELL UNIVERSITY MEDICAL COLLEGE

IN NEW YORK CITY

ANNOUNCEMENT

1903-1904

NEW YORK CITY
PUBLISHED BY THE UNIVERSITY



CORNELL UNIVERSITY MEDICAL COLLEGE

CORNELL UNIVERSITY MEDICAL COLLEGE

IN NEW YORK CITY

ANNOUNCEMENT

1903–1904

NEW YORK CITY
PUBLISHED BY THE UNIVERSITY

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CALENDAR.

1903–1904.

September 30, Wednesday—College opens.
November 3, Tuesday—Election Day. Legal holiday.
November 26, Thursday, to November 30, Monday 9 A.M.—Thanksgiving recess.
December 23, Wednesday, to Monday, January 4, 9 A.M.—Christmas recess.
January 4 to 9—Mid-winter examinations.
February 22, Monday—Legal holiday.
April 1—Good Friday.
May 16, Monday—Examinations for undergraduates begin.
May 23, Monday—Final examinations for graduation begin.
June 8, Wednesday—Commencement.

For Calendar of Instruction in Ithaca, see page 99.

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The Medical College Council consists of the President of the University; the Dean of the Medical Faculty; three members of the Board of Trustees elected by that body; and two Professors of the Medical Faculty elected by that body. The Council is charged with the business administration of the College under the supervision and direction of the Board of Trustees. For the current year it is constituted as follows:

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J. CLIFTON EDGAR, Ph.B., A.M., M.D.,
Professor of Obstetrics and Clinical Midwifery, Attending Surgeon to Maternity Hospital.

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INSTRUCTORS.

Heads of Sub-Departments.

CHARLES N. BANCKER CAMAC, M.D.,
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JEREMIAH S. FERGUSON, M.S., M.D.,
Instructor in Histology.

THOMAS WOOD HASTINGS, A.B., M.D.,
Instructor in Clinical Pathology.

Louis W. Riggs, A.M., Ph.D.,
Instructor in Chemistry and Physics.

Edmund Pendleton Shelby, A.B., M.D.,
Instructor in Pharmacology and Therapeutics.

Otto H. Schultze, A.B., M.D.,
Instructor in Gross Pathology.

William R. Williams, A.M., M.D.,
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Apothecary.

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ARTHUR W. ROBERTS, Ph.M.B.

J. THORN WILLSON,
Clerk of the College.
First Avenue, 27th and 28th Streets.

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GENERAL STATEMENT.

The Medical Department of Cornell University was established in 1898. This undertaking, which had been contemplated by the Trustees for several years, was made possible by the gift to the University of a commodious and fully equipped building designed for medical instruction, and by the bestowal of a sufficient "Endowment Fund" for the generous maintenance of a large and vigorous school for higher education in medicine.

The Main College Building comprises a Medical School and Dispensary, with principal entrance on First Avenue, opposite Bellevue Hospital, and occupies the entire block between Twenty-seventh and Twenty-eighth Streets on First Avenue, extending back 100 feet, thus affording an available space of nearly 20,000 feet on each floor. The building is designed in a severe style of Renaissance architecture, and is constructed of Indiana limestone and red brick. See page 134.

The Loomis Laboratory (founded 1886) serves the purpose of undergraduate instruction, in connection with the laboratories in the College building, in such subjects as can best be taught in a laboratory, and it is also especially available to graduates in medicine who may desire to pursue further study or original research in the various departments of laboratory investigation.

The Metropolitan Street Railroad cars on Twenty-eighth and Twenty-ninth Streets and First Avenue connect with all the other lines of the company, by a system of transfers at Fourteenth, Twenty-third, Thirty-fourth, and Fifty-ninth Streets, and so put all the hospitals in the city within easy access of the College. A convenient station of the Manhattan Elevated Railroad is also at Twenty-eighth Street and Third Avenue.



THE LOOMIS LABORATORY

CLINICAL FACILITIES.

The College Dispensary.—In the portion of the College Building allotted to the Dispensary ample provision has been made for the accommodation of the various clinical departments, of which there are eleven, viz.: General Surgery, General Medicine, including the diseases of the Heart and Lungs, Gynæcology and Obstetrics, Diseases of Children, of the Nervous System, of the Genito-Urinary System, of the Skin, Eye, Ear, Nose and Throat, and Orthopædic Surgery.

Each Department has been furnished with all the instruments and apparatus necessary for the examination and treatment of patients. A number of small amphitheatres are placed in the Dispensary, so that the clinical instruction provided by the curriculum can be carried on without interfering with the treatment of patients.

The attendance in the Dispensary averages 500 patients daily, and is steadily increasing, so that the clinical material is abundant and accessible.

Members of the Faculty of Cornell Medical College hold appointments in the hospitals and dispensaries of the city, and are enabled to utilize for teaching purposes the large quantity and variety of clinical material of ten of the great City Hospitals, viz.:

Bellevue Hospital.—Twenty-sixth Street and East River.

This hospital has 900 beds, and receives 24,000 patients annually. In this building is an amphitheatre capable of seating 300 students, and also a number of small, newly built operating theatres, where section demonstrations in surgery and gynæcology are made before the class. Connected with the hospital is a hydropathic establishment where students are shown the practical applications of baths, douches, massage, etc.

The following clinics are held during the session:

Obstetrics and Gynæcology—Monday, 3 P.M.
Professor POLK.

Medicine—Tuesday and Friday, 3 P.M.
Professors LOOMIS and THOMPSON.

Surgery—Wednesday and Thursday, 3 P.M.
Professors STIMSON, WOOLSEY, DENNIS, and GWYER.
Genito-Urinary—Wednesday, 3 P.M., for half the term.
Professor ALEXANDER.
Nervous Diseases—Friday, 4 P.M.
Professor DANA.

City Hospital (formerly Charity Hospital)—Blackwell's Island, East River. To reach this institution the steamer should be taken at the foot of East Twenty-sixth Street.

This hospital has a capacity of 1,000 beds. It offers special advantages for the study of venereal and genito-urinary diseases.

New York Hospital—Fifteenth Street, between Fifth and Sixth Avenues.

This is one of the most thoroughly equipped hospitals in the city, and has connected with it a large Out-Patient Department.

Clinical instruction is given by Professors Stimson, Loomis, Murray, Bolton, and Johnson.

Presbyterian Hospital—Madison Avenue and Seventieth Street.

This is a large general hospital of 350 beds, and includes extensive and varied medical and surgical service. Clinical instruction is given by Professors Thompson and Woolsey.

Willard Parker and Reception Hospitals—Foot of East Sixteenth Street.

These hospitals are in charge of the Board of Health, New York City, and offer unrivalled opportunities for the study of contagious diseases—such as diphtheria, scarlet fever, measles, smallpox, and typhus fever. They contain 200 beds.

Professor Winters gives bedside instruction to small sections of the fourth-year class in the former hospital.

New York Skin and Cancer Hospital—Nineteenth Street and Second Avenue.

This hospital affords accommodation for the treatment of a large number of patients afflicted with cancer and skin diseases. Section instruction in dermatology is conducted here by Professor Elliot and assistants.

St. Francis' Hospital—609 Fifth Street.

A general hospital with a capacity of 230 beds. Section instruction here is under the charge of Professor Kammerer.

St. Vincent's Hospital—195 West Eleventh Street.

This is a general hospital containing nearly 200 beds.

Section teaching and clinics are given here by Professor Dennis and Dr. Aspell.

New York Eye and Ear Infirmary—Second Avenue, corner Thirteenth Street.

This hospital is devoted to the treatment of eye, ear, and throat diseases.

Clinical instruction is given in this institution by Professors Bull and Bacon, aided by a corps of assistants.

Manhattan Eye and Ear Hospital—103 Park Avenue.

This is one of the largest institutions for the treatment of this class of diseases in the city. Professor Knight and his assistants give instruction here in laryngology.

In addition to these hospitals, the teaching corps of the Medical Faculty is represented upon the visiting staffs of many other hospitals and dispensaries in the city, where Cornell students are invited to attend clinics. Among these are: The Maternity Hospital, Gouverneur Hospital, Harlem Hospital, Almshouse and Workhouse Hospital, Emergency Hospital, Randall's Island Hospital, Columbus Hospital, German Hospital.

REQUIREMENTS FOR ADMISSION.

The laws of New York State require of the prospective student of medicine a preliminary education equivalent to that obtainable in a four years' course in any academy or high school recognized by the Regents as maintaining a satisfactory standard, before the applicant can be admitted to any class in any medical college in the State. A list of the subjects ordinarily taught in these schools is given in handbook No. 3 published by the Regents, and mailed on application to the "Regents' Office, Albany, New York." In this it will be found that each subject, according to its character and the time usually devoted to it, is assigned one or more "counts," 48 of which are needed to obtain the medical-student certificate. This official approval of the preliminary education may be granted by the Regents on presentation to them of properly attested evidence that the requisite

work was accomplished in a registered institution. In lieu of this the applicant is required to pass the examinations conducted by the State authorities at regular intervals throughout the year. The certificate obtained on examinations is called academic, otherwise an equivalent.

Hitherto the Medical Department of Cornell University has been open to all who held the ordinary 48 count certificate. As this can be obtained with little or no knowledge of the English language, and of subjects which are absolutely essential to a proper understanding of any natural science, the Faculty has decided that (beginning with the class entering in October, 1902) all applicants for admission must earn their medical-student certificate in part upon the following subjects, as described in the Regents' "Handbook No. 3, High School Department, Examinations":

Algebra, 4 counts; Plane Geometry, 4 counts; Elementary United States History and Civics, 2 counts; Second-Year English, or its equivalent, 8 counts; Second-Year Latin, or the first four books of Cæsar's "Commentaries," or First-Year Latin and First-Year German, French, or Spanish, 8 counts. Total, 26 counts.

The subject-matter covered in these requirements, which must be included in the Regents' certificate, is briefly summarized as follows:

Algebra includes the elements of the subject through quadratic equations.

Plane Geometry includes the geometry of the plane, the ordinary definitions, and demonstrations of simple original theorems.

Elementary United States History and Civics includes important historical dates, the character and purpose of the different wars, the purport of the Constitution, and the relation of the Federal and State governments.

Second-Year English comprises (1) composition, including the theory of construction in prose; (2) terms of style, figures of speech, and prosody; (3) literature, *i.e.*, a knowledge of "Twice-Told Tales," "Sir Roger de Coverley" papers, "Sesame and Lilies," "Ancient Mariner," "Cotter's Saturday Night," "Vision of Sir Launfal," "Silas Marner," "Julius Cæsar," "First Bunker Hill Oration."

Second-Year Latin includes a knowledge of grammar and the ability to translate at sight simple passages from any standard author, or from the first four books of Cæsar's "Commentaries." The alternative to Second-Year Latin, namely, First-Year Latin with First-Year German, French, or Spanish, comprises under the heading First-Year Latin a knowledge of grammar, the rendering of simple prose from Latin into English, and *vice versa.* Under the heading of First-Year German, French, or Spanish, a similar knowledge is required.

The total number of counts allowed by the Regents for these required subjects aggregate 26. The Faculty recommends that the remaining 22 counts necessary to complete the certificate be made up from the following subject-groups enumerated in the Handbook: Science; Mathematics; Language and Literature; History and Social Science.

Students who can earn a portion of these 22 counts upon Physics and Inorganic Chemistry, as is earnestly recommended, may be given credit for them, and the time thus gained will be devoted to intensive work in the medical branches.

As heretofore, those applicants who have successfully completed the first year in any college or university recognized by the Regents as maintaining a proper standard will be admitted to the first year of the medical course on presentation of the usual Regents' certificate, together with evidence of their year or years of college training. Attention is again called to the fact that the Medical College holds no entrance examinations, and therefore the applicant for admission must, except in the case of those who have had one or more years in college or university, present the special Cornell Medical-Student Certificate granted by the Regents to those who have fulfilled the requirements, or must have the Regents' endorsement on the certificate that the requirements have been complied with.

PROPOSED COURSE FOR THE DEGREE IN ARTS (A.B.) AND IN MEDICINE (M.D.).

As a liberal education in the arts and sciences is of great advantage to prospective students of medicine, all who can are

urged to take the Freshman, Sophomore, and Junior years in the Academic Department at Ithaca. After the completion of these years in the Academic Department (in which all the work is elective) the student is permitted to elect, as the fourth year of his A.B. course and first year of his M.D. course, a year's work in the Medical Department at Ithaca. He may then take his fifth year of work—the second of the medical course—either in Ithaca or in New York; but he must take the last two years of the medical course in New York. In this way he will obtain the A.B. degree at the end of four years, and the M.D. degree at the end of seven years of study. This is possible because the first two years of the medical course in New York are offered in duplicate at the University in Ithaca.

Women must take the first two years in medicine in Ithaca, where special accommodations are provided for them in the Sage College. They are received at the Medical College in New York City in the third and fourth years only.

Students who have taken the A.B. degree, as above, will, if they have anticipated in the Academic Department the scientific studies prescribed in the medical course, be admitted to advanced standing in the Medical College in New York. Those who have completed all the subjects prescribed for the first two years of the course in medicine will be admitted to the third-year class. After passing the requisite examinations at the end of this and then of the fourth year, they will be advanced to practically a fifth year, consisting almost entirely of practical training. At its close, provided the work has been satisfactory, the M.D. degree will be conferred. As this fifth year gives opportunity for more than the requisite work, students who have taken the A.B. degree in the Academic Department may, even if deficient in one or more of the prescribed subjects of the medical course, still be admitted to the third-year class in New York, but only upon the recommendation of the Medical Faculty at Ithaca.

The schedule of this fifth year will be somewhat as follows:

There will be weekly recitations in the subjects of Medicine, Surgery, Anatomy, Materia Medica and Therapeutics, and Obstetrics and Gynæcology. A competent corps of instructors is suggested by the Faculty, but the students are at liberty to make their own selection and financial arrangements in quizzing, the

chief object of which is preparation for the competitive examinations for the appointment of internes held each spring by the various hospitals. The fee for such "quizzes" averages about $100, and the time will be from 5 to 6 P.M., or at any other convenient hour daily. The rest of the day is to be devoted to practical training in the College dispensary and laboratories. In the dispensary the departments of General Medicine and General Surgery hold morning and afternoon sessions. The afternoon hours are devoted to the nine specialty departments of Neurology, Gynæcology, Pediatrics, Laryngology, Orthopædic Surgery, Dermatology, Ophthalmology, Otology, and Diseases of the Genito-Urinary System.

The Ithaca students who take this fifth year will act as regularly appointed clinical assistants in these various departments for the twelve months following the conclusion of their fourth year of medicine. Groups of five will serve during the morning hours, on alternative days, in the Departments of General Medicine and Surgery. At the end of six months those who have had the privilege of selecting in the order of standing at the end of the fourth year general medicine will change to general surgery, and *vice versa.* In the mornings of the days when not engaged in the dispensary these groups of five students will report in one of the laboratories of clinical or histological pathology or bacteriology and, as they may elect, either pursue research work upon a subject to be selected after consultation with Professor Ewing, or act as assistant (unpaid) instructors in the class-room work in these laboratories. The results of research work, if satisfactory, will be included in the regular publications of the department of Pathology.

During the afternoons, groups of not more than three students will serve in rotation as clinical assistants in each of the nine specialty departments of the dispensary. The length of time spent in each department will vary somewhat with the number of students and the duration of vacation desired; but at present it is expected that about one month will be devoted to daily attendance in each specialty. It is the intention of the Faculty to allow the utmost liberty in the selection of courses consistent with the acquirement of a thorough general and practical education. For this reason, if desired, the student will be assisted in obtain-

ing the position of clinical assistant in any dispensary or department of a dispensary which supplies opportunities equivalent to those offered by the College. The internes in the various city hospitals are often forced to absent themselves from duty on account of sickness or other reasons. The members of the Faculty who visit such hospitals can thus frequently supply substitutes from competent students for these positions for longer or shorter periods. Such places, of course, cannot be promised in advance, but may confidently be expected by a greater or less number.

The required work of this fifth year is then briefly summarized as follows:

A quiz of at least one hour a week in each of the subjects of Medicine, Surgery, Anatomy, Materia Medica and Therapeutics, and Obstetrics and Gynæcology from October to April inclusive. At least two hours' daily service for four months each (preferably in the morning) in general medicine and general surgery in the College dispensary; at least two hours' daily service for one month (preferably in the afternoon) in each of the nine specialty departments of the College. If any of the work is elected in another dispensary or hospital, it must be one under the supervision of some member of the Faculty.

The fees for this year will be $100, payable in advance to the College; and a graduation fee of $25, payable at the end of the fifth year; and the fee payable to the quiz masters, of not more than $100.

REGENTS' ENTRANCE EXAMINATIONS AND CERTIFICATES.

The following requirements for admission to candidacy for a degree in *any medical college in New York State* were established by laws passed by the Legislature, to take effect March 21, 1896.

Medical-Student Certificate.

Each student who matriculates with the intention of becoming a candidate for the degree of doctor in medicine, whether he comes to New York to begin or continue the study of medicine, must file

with the Dean of the College a medical-student certificate issued by the Regents of the University of the State of New York.

This certificate is granted according to the following extract of the Laws of 1896, ch. iii.:

To provide for the preliminary education of medical students.

The degree of bachelor or doctor of medicine shall not be conferred in this State before the candidate has filed with the institution conferring it the certificate of the Regents that before beginning the first annual medical course counted toward the degree (unless matriculated conditionally as hereinafter specified) he had either graduated from a registered college or satisfactorily completed a full course in a registered academy or high school; or had a preliminary education considered and accepted by the Regents as fully equivalent; or held a Regents' medical-student certificate, granted before this act took effect; or had passed Regents' examinations as hereinafter provided. A medical school may matriculate conditionally a student deficient in not more than one year's academic work or twelve counts of the preliminary education requirements, provided the name and deficiency of each student so matriculated be filed at the Regents' office within three months after matriculation, and that the deficiency be made up before the student begins the second annual medical course counted toward the degree. Students who had matriculated in a New York medical school before June 5, 1890, and students who had matriculated in a New York medical school before May 13, 1895, as having entered before June 5, 1890, on the prescribed three years' study of medicine, shall be exempt from this preliminary-education requirement.

A medical-student certificate may be earned without notice to the Regents of the conditional matriculation either before the student begins the second annual medical course counted toward the degree or two years before the date of the degree for matriculants in any registered medical school, in the four cases following:

1. For matriculants prior to May 9, 1893, for any twenty counts, allowing ten for the preliminaries, not including reading and writing.

2. For matriculants prior to May 13, 1895, for arithmetic, elementary English, geography, spelling, United States history, English composition and physics, or any fifty counts, allowing fourteen for the preliminaries.

3. For matriculants prior to January 1, 1896, for any twelve academic counts.

4. For matriculants prior to January 1, 1897, for any twenty-four academic counts.

But all matriculants, after January 1, 1897, must secure forty-eight academic counts, or their full equivalent, before beginning the first annual medical course counted toward the degree, unless admitted conditionally, as hereinbefore specified, when the deficiency must be made up before the student begins the second annual medical course counted toward the degree.

This act shall take effect March 21, 1896, except that the increase in

the required course of medical study from three to four years shall take effect January 1, 1898, and shall not apply to students who matriculated before that date and who receive the degree of doctor of medicine before January 1, 1902.

Notes on the Law.

1. The Regents will accept in lieu of examination for a medical-student certificate any one of the following:

(*a*) A certificate of having successfully completed at least one full year's course of study in any college or university registered by them as maintaining a satisfactory standard.

Certificates should be issued in due form by the president, dean or principal of the institution, and should be signed and authenticated by seal or acknowledgment before a notary.

(*b*) A certificate of having passed in a registered institution examinations equivalent to the full collegiate course of the freshman year or to a completed academic course.

Three full academic years of satisfactory work may be accepted as a high-school course till August 1, 1896, when four full academic years will be required.

(*c*) Any forty-eight academic counts or diploma earned in Regents' examinations.

(*d*) A certificate of graduation, or substantial equivalent, from any registered gymnasium or realschule in Germany, Austria, Russia, Switzerland, Norway, Sweden, or Denmark.

(*e*) A certificate of successful completion of a course of five years in a registered Italian *ginnasio* and three years in a *liceo* or *instituto technico*.

(*f*) The bachelor's degree in arts or science, or substantial equivalents from any registered institution in France, Spain, Portugal, Roumania, or Greece.

(*g*) Any credential from a registered institution or from the government in any foreign state or country which represents the completion of a course of study equivalent to graduation from a registered New York high school or academy.

2. Modifications in requirements for medical-student certificates:

(*a*) Partial Equivalents. Evidence of completion in a registered school of one or more years of satisfactory high-school work, and Regents' examinations in subjects representing the balance of the required four-year course (any 12, 24, or 36 additional counts).

(*b*) Cumulative Credit. Regents' examinations in the second or third year of any language course will be accepted as including the preceding years in those courses.

(*c*) Date of Certificate. Candidates unable to offer certificates of the required academic work in a registered institution may present evidence to the Regents that they had the required preliminary education before beginning the second course counted toward the degree, and may, on passing Regents' examinations, receive their certificates as of the date when the preliminary work was completed.

(*d*) A detailed statement is essential in equalling equivalent work in lieu of examinations, for which form E has been prepared, and may be obtained on application.

3. Whether credentials from other States and countries can be accepted in lieu of examination may be ascertained by written application to College and High School Department, University of the State of New York, Albany, N. Y.

4. Any student who has matriculated under the legal requirements in regard to Regents' examinations, existing at the time of matriculation, will not require another certificate whenever he may be graduated.

5. If students unable to offer equivalents come from out of the State, they may enter the second course counted toward the degree, provided that at the preceding June or September examination they meet the preliminary requirement, and further provided, that the medical-student certificate can be dated back under (*c*) above.

Medical-student certificates issued on "equivalents" without examination, may be obtained at any time before the degree of M.D. is conferred, provided that the course of study for which the certificate is issued was completed within the prescribed time.

Examinations under the Act.

Students who do not obtain a medical-student certificate without examination must pass an examination on the subjects required by the Regents. These examinations are held entirely under the charge of the Regents in New York, and in many other places throughout the State, on the following dates:

CALENDAR OF REGENTS' EXAMINATIONS.

YEAR.	JAN.	MARCH.	JUNE.	SEPT.
1903 . . .	26–30	25–27	15–19	Sept. 29 to Oct. 1
1904 . . .	25–27	23–25	13–17	27–29

NOTE.—September examinations will be held in New York, Albany, Syracuse, and Buffalo, for law and medical students only. The other examinations are held in New York at the Grand Central Palace, Lexington Ave. and 44th St., and in numerous academies and high schools throughout the State for professional and academic students.

Extracts from Regents' Rules.

Order of Studies.—There is no restriction in the order in which studies may be taken. Advanced students who may come from other States, or who, for other reasons, have not passed in elementary subjects, may take them at any time: *e. g.*, arithmetic after algebra or geometry; English composition after rhetoric, etc.

Time Limit.—There is no limit of time, but all credentials issued by the university are good until cancelled for cause. Studies necessary to obtain any credential may be passed at different examinations.

Seventy-five per cent. of correct answers is required in all subjects.

Answer papers will be reviewed in the Regents' office, and all papers below standard will be returned to the candidates. For those accepted, pass-cards will be issued.

Pass-Cards.—A Regents' pass-card is not limited in time; therefore it is not necessary to pass any Regents' examination a second time.

Medical-Student Certificate.—When all requirements are fulfilled, the Regents grant a medical-student certificate on payment of a fee of 25 cents.

On receiving this certificate, the candidate must send it to the secretary or recording officer of the university or college at which he intends to study medicine.

N. B.—*Candidates for medical students' examination should send notice at least ten days in advance, stating at what time and in what studies they wish to be examined,* that required desk-room may be provided at the most convenient place.

Candidates who fail to send this advance notice will be admitted only so far as there are unoccupied seats.

Medical-Student Certificates Without Examinations.

Students who may be entitled to the medical-student certificates on equivalents (see notes on the law, *a, b, c, d, e, f,* and *g*) are advised to present or forward their credentials to the Secretary of the College, who will send them to the Regents for examination and approval. They will be returned as soon as verified, and, if accepted, the proper certificate will be sent with them. The Secretary of the College will furnish, on application, blank forms of collegiate, academic, or high-school certificates.

Other equivalent credentials from foreign countries or from other States may be accepted by the Regents at their discretion.

The secretary will furnish full information on request.

Directions for Obtaining a Regents' Medical-Student Certificate.

1. Give the full name of the applicant, the exact name of the institution and of the department attended, an accurate description of the course pursued, using the same terms that are given in the official announcement, circular, or catalogue of the institution.

Send an official announcement, circular, or catalogue of the institution, showing:

(*a*) Requirements for admission; *i.e.*, subjects and years given to their completion.

(*b*) Requirements for graduation in each course, including subjects pursued and time devoted to each.

Amendment to Medical Law, 1902.

At their meeting, July 1, 1901, the Regents took the following action:

Voted, That beginning with the September, 1901, medical licensing examinations a recent photograph of each candidate be required as a part of the application for admission.

In accordance with the medical law, as amended in 1902, the Regents admit conditionally to the tests in anatomy, physiology and hygiene, and chemistry, applicants 19 years of age certified as having studied medicine not less than two full years of at least nine months each, in two different calendar years, in a medical school registered as maintaining at the time a satisfactory standard; provided that such applicants are of good moral character, have the requisite preliminary education, and pay the fee of $25; the final examinations in surgery, obstetrics, pathology and diagnosis, and therapeutics, including practice and materia medica to be passed after having finished the full period of study and having received the medical degree.

Candidates who have studied medicine not less than the minimum period of two years, whether undergraduates or graduates in medicine, are admitted conditionally as aforesaid to the examinations in anatomy, physiology and hygiene, and chemistry; if such applicants fail to attain 75 per cent. in one or more of these three topics they must be reëxamined in all topics and must wait at least six months before reëxamination; and candidates failing to obtain at least 75 per cent. in one or more of the topics at the final examinations in surgery, obstetrics, pathology and diagnosis, and therapeutics, including practice and materia medica, after having passed in the three preliminary topics must be reëxamined in all four of the final topics and must wait at least six months before reëxamination.

The Regents may, in their discretion, accept as the equivalent of the first year in a registered medical school evidence of graduation from a registered college course, provided that such college course shall have included not less than the minimum requirements prescribed by the Regents for such admission to advanced standing.

JAMES RUSSELL PARSONS, JR.,
Secretary.

Regents' Office, Albany, N. Y.

REGISTRATION AND MATRICULATION.

Students on entering the College must register and pay the registration fee of $5. The payment of this fee is required only once. They will receive a receipt which will be exchanged for a certificate of full matriculation when they shall have complied with the requirements stated on page 26. No conditional matriculation will be accepted. The full 48 count Regents' certificate including the 26 counts in the subjects specified must be presented.

THE ADMISSION OF STUDENTS FROM OTHER ACCREDITED MEDICAL COLLEGES.

Admission to Advanced Standing.

Graduates of Cornell, Yale, Harvard, Princeton, University of Pennsylvania, Johns Hopkins, Columbia, University of Michigan, and other accredited universities, who have taken either a preparatory medical course or special work in organic or inorganic chemistry, physics, or physiology, will be allowed credit for the work which they have done, and may be excused from the recitations upon these subjects, and from the exercises of the chemical laboratory in the first year, provided they pass examinations before the professors of these departments, and provided they give to dissection and electives as described on pages 46-47, in the various departments, a full equivalent in hours to the subject they may have passed by examination.

Students who have had training in microscopical technique or in histology will be given advanced work in the histological laboratory.

Students who have already attended the requisite number of courses in other accredited medical colleges may be admitted to advanced standing in any one of the years of the four years' course of the Cornell University Medical College by presenting a Regents' medical-student certificate and by passing examinations in the subjects described on pages 87-89 as completed, in the year or years previous to that which the student desires to enter. The applicant must also present certificates of having satisfactorily completed laboratory courses equivalent to those required of the Cornell medical students in the year or years previous to that to be entered.

According to law, no student from a Medical School which has not been registered by the Regents may obtain a degree on less than two years of medical study in this State.

Holders of Special Degrees.

Graduates of pharmacy or of dental or veterinary or other professional schools, who can present satisfactory evidence of hav-

ing completed any course of study required in any year by this College, may upon passing a satisfactory examination be excused from attendance upon instruction in that subject, provided they take equivalent additional work in other branches.

Admission to Special Courses.

Graduates in medicine, or students who desire to pursue a special course without graduation, are admitted to registration as special students after approval by the head of the department conducting the course, without Regents' or other preliminary examination. Such special courses do not count in any way as part of the four years' course required of candidates for the degree of doctor in medicine. Further information regarding such courses, fees, etc., may be obtained by addressing the Secretary of the Cornell University Medical College, First Avenue, 27th to 28th Streets, New York.

NEW YORK STATE SCHOLARSHIPS.

Under the law of the State the Superintendent of Public Instruction is empowered to award annually a number of free scholarships in Cornell University equal to the number of Assembly Districts in the State. These scholarships entitle the holder to free tuition for four years in any department of Cornell University. They are awarded on examination to candidates from the general Assembly Districts "in consideration of their superior ability and as a reward for superior scholarship in the academies and public schools of this State."

For particulars in regard to these scholarships, application should be made to the Superintendent of Public Instruction at Albany, N. Y.

Holders of State scholarships are notified that failure to register before the close of registration day involves the severance of their connection with the University and consequently the forfeiture of their scholarships. The President of the University is required by law to send immediate notice of such vacancies to the Superintendent of Public Instruction and the Superintendent fills vacancies forthwith.

UNIVERSITY UNDERGRADUATE SCHOLARSHIPS.

Pursuant to the action of the Trustees, there will annually be thrown open to competition for all members of the freshman or first-year class who are registered in courses leading to first degrees, at a special examination held at Ithaca, at the beginning of the freshman year, eighteen scholarships of the annual value of $200.

Students of high ability from the State of New York will have the additional advantage of being able to secure State scholarships, as there is nothing in the University statutes to prevent a student from holding both a State scholarship and a University scholarship.

These scholarships will be given for passing examinations which shall average the highest in any three of the following groups, of which group (*a*) must be one. Previous to entering this competitive examination, however, candidates are required to pass satisfactorily the regular entrance examination in English, or the entrance examination in English given by the College Entrance Examination Board. *School certificates, Regents' diplomas, and normal school diplomas* are not accepted in place of this English examination.

(*a*) Plane geometry and algebra through quadratic equations. (*b*) Solid geometry, advanced algebra, plane and spherical trigonometry. (*c*) Greek. (*d*) Latin. (*e*) French. (*f*) German.

For further information in regard to the scholarships see the Register of Cornell University.

CHARGES FOR INSTRUCTION.

First Year.

Registration*	$5 00	
Tuition	$150 00	
Laboratory fees	$35 00	
		$190 00

* The registration fee is payable only once, on entrance.

Second Year.

Tuition	$150 00	
Laboratory fees	$30 00	
		$180 00

Third Year.

Tuition	$150 00	
Laboratory fees	$30 00	
		$180 00

Fourth Year.

Tuition	$150 00	
Laboratory fees	$25 00	
Graduation fees	$25 00	
		$200 00

Each student in the first three years is required to pay to the Clerk of the College ten ($10) dollars each year to cover breakage in the laboratories. This sum, less the amount charged against it for breakage, will be returned to him at the end of each year.

Tickets must be taken out and paid for at the beginning of the session.

SPECIAL STUDENTS.

Special students, on the recommendation of the head of the department concerned, may be admitted to any of the courses of instruction offered in the College, or to any course of instruction especially provided, on the payment of a registration fee of five dollars and a tuition fee of twenty-five dollars, except in dissection, where the tuition fee is fifteen dollars.

The graduation fee is payable on registering for graduation. The tuition fees for the first two years at Ithaca are identical with those of the same period in New York. All fees are payable at the beginning of the term, but in special cases they may be paid semi-annually in advance. No rebate will be made in any case.

No remission of laboratory fees will be made because of previous instruction elsewhere in the subjects.

GENERAL STATEMENT OF THE PLAN OF INSTRUCTION.

The chief features in the scheme of instruction are thorough laboratory training in all the subsidiary branches, daily recitations from standard text-books, clinical teaching in dispensaries and at the bedside in hospitals, and enough didactic lectures to make clear the general principles and conflicting theories in the practice of medicine and surgery. All students in any one class advance simultaneously in the various subjects, and no section or group works apart from any other, thereby losing the opportunity to appreciate the relationship of the different subjects which at any given time may be under discussion. Allowance, however, has been made for those who through natural endowments or superior energy or previous education can outstrip their less fortunate fellows. A careful record is kept of the attendance and character of the work of every student, and by this means at the end of the year each is placed in the section to which this record entitles him. A system of electives in clinical, laboratory, and recitation work is also provided, which it is the aim of the Faculty to enlarge as opportunities arise. A student is required to master all the subjects taught in any given year before being allowed to advance to the next, as the knowledge acquired in each year is necessary for a proper understanding of that which follows. Examinations are held at the end of each session; a failure to pass not more than two subjects, one of which at least must be a laboratory subject, is allowed in the spring, but every subject must be satisfactorily passed at the beginning of the next ensuing college year, or the applicant will be compelled to repeat the work of the preceding year.

The essential feature of the entire system is the division of the classes of the several years into small sections for recitations, demonstrations, laboratory exercises, and for clinical instruction

in the college dispensary, and in the wards of the numerous hospitals attended by the members of the faculty.

The following is a statement of the curriculum in each of the four annual sessions necessary to obtain the degree of M.D., and attention is called to the careful arrangement of the instruction in time and correlation in subject-matter so as to provide for a proper understanding and assimilation of the knowledge imparted in the different departments.

If a student, without neglecting his required schedule work, desires to take advanced work and can make an opportunity to do this, without interfering with the work of other students, he shall be permitted to do so and shall receive credit for it.

The first year is devoted to anatomy—several consecutive uninterrupted hours being provided for dissection—normal histology, chemistry, and physics. The gross anatomy of the thoracic, abdominal, and pelvic viscera is demonstrated in outline in the early weeks of the session in anticipation of the examination of these organs in the histological laboratory and a consideration of their physiology in the second half of the session.

The general principles of mechanics, hydrostatics, optics, electricity, heat, and acoustics, and their application to medicine, are taught in lectures illustrated by experiments. Inorganic chemistry is studied in the laboratory throughout the year. The class is divided into small sections, each of which must attend daily one or more recitation exercises in anatomy, histology, physiology, and chemistry. These follow as closely as possible the practical work.

Students who have had the advantage of a thorough preliminary education in physics and chemistry before entering the medical school, after satisfactorily demonstrating to the professor in charge of this department, by examination or otherwise, that they are familiar with the work of the first year, may be excused from attendance upon these subjects. In their place they must elect at least one of the following courses given in the second year—namely, laboratory pharmacology, or physiological chemistry, or bacteriology.

During the second year anatomy, physiology, and chemistry are completed, and the study in text-books of medicine, surgery, obstetrics, and pathology is begun. The gross anatomy of the

organs of special sense, and then that of the nervous system, is taught at the outset of the year by demonstrations to small groups of students. The demonstration of these organs is followed as closely as possible by the study of them in the histological laboratory during the first half of the session. The lectures and recitations in physiology follow the same course, and, in connection with the study of the gross and histological aspects of the parts under discussion, are more fully comprehended. Organic and physiological chemistry are studied in the laboratory and by lectures and recitations throughout the year. At the same time a laboratory course in pharmacology is pursued, familiarizing the student with the physical and chemical properties of drugs. Bacteriology is begun, the student commencing with the preparation and care of media and the recognition of the gross and microscopical characteristics of microörganisms.

During the first few weeks of the term lectures are delivered upon the general principles of pathology, with particular reference to the elucidation and classification of the various forms of inflammation. The substance of these lectures will form the basis of the subsequent instruction in this subject in all departments, and thus insure uniformity in the teaching and understanding of the causes of disease. These lectures are supplemented by autopsies before small sections to demonstrate gross lesions. Having obtained some knowledge of pathology, the student by means of recitations is made familiar with the principles of surgery, medicine, and obstetrics.

Students who have completed elsewhere courses in physiological chemistry or pharmacology equivalent to those of the second year, may by passing examinations at the beginning of the term be excused from further attendance upon them.

Students thus excused from part of the second-year work and those who have been allowed electives in their first year may take one or more of the following elective courses during their second year—namely: 1. Bacteriology in its practical relation to disease. 2. Materia medica recitations of the third year. 3. Manikin course in obstetrics. 4. Obstetrical clinic. The two latter elective courses are in preparation for the required work in practical obstetrics, which, usually taken in the third, can thus be taken during the second summer if desired.

Students are allowed to take the State Board licensing examinations in the primary subjects at the end of the second year. Those intending to reside in this State are encouraged to avail themselves of this opportunity.

In the third year medicine, surgery, materia medica, therapeutics, and obstetrics are studied systematically from text-books and practically at the bedside, in the dispensary, and in general clinics. A sufficient number of didactic lectures are given by the Professors of Medicine and Surgery at the beginning of the session to explain general principles in symptomatology and diagnosis. Throughout the year the class must attend in small sections one or more daily recitations from standard text-books upon subjects previously assigned and learned. Pathology is studied in greater detail than previously, both in the laboratory and in the dead-house, and as far as possible morbid processes are demonstrated in advance of the study of the disease in the text-book or its clinical presentation.

In conjunction with the bedside teaching, instruction is given in all of the modern laboratory aids in diagnosis classified under the term of clinical pathology.

Students in groups of ten or twelve are taught the methods of examining patients for the detection of abnormal physical signs, and at the close of the session are expected to be familiar with the recognition and treatment of the common diseases and be conversant with the fundamental subjects of a medical education. The specialties taken up in this year are neurology, pediatrics, toxicology, and gynæcology. They are taught by clinical lectures as part of the general subjects of the practice of medicine, surgery, and obstetrics.

To meet the requirements of hospital and other boards of examination, such as those of the civil service or of the army and navy, students who wish to compete in these examinations may elect in third and fourth years to have all their recitation exercises with special instructors appointed by the faculty. A separate fee is required for this service.

The fourth year is devoted chiefly to the study of diagnosis and treatment of disease at the bedside, in the dispensary, and in clinics. The extent of this may be inferred from the present arrangement of the schedule, which contemplates about fifty

hours of hospital-ward work in medicine and nearly the same number in surgery for every student. There are as few lectures as are consistent with the proper exposition of the chief problems confronting the profession, and these are delivered at the outset of the term, in order that the student may become familiar as soon as possible with the facts which are to be taught practically. For example, to the Professor of Medicine twelve didactic lectures are assigned. This proportion has to be exceeded somewhat in therapeutics, obstetrics, and the specialties, but many of these lectures are illustrated by the presentation of typical cases and are really clinics. The clinical instruction in surgery is supplemented by an operative course in which the student performs upon the cadaver all the common operations. Particular attention is also given to the methods of making medical and surgical diagnoses, and in this connection constant use is made of the bacteriological and chemical laboratories, where the student examines specimens taken at the bedside during one exercise, and reports the results to the class at the next.

Hygiene and its application in the province of the physician and public health officer is taught by lectures supplemented by demonstrations of the plans and methods of the city health board.

The major part of the theoretical instruction, as in the previous years, is given by recitations in the subjects of medicine (including neurology), surgery (including orthopædic surgery and genito-urinary diseases), therapeutics, obstetrics, gynæcology, and pathology.

The instruction in the specialties, which is made the distinguishing feature of this final year, is begun with a few clinical lectures and is continued by a course in the examination and treatment of dispensary patients by each student. Every one receives from fourteen to twenty-eight hours of this training (the number varies somewhat with the subject), and should become reasonably proficient in the use of instruments, the ability to make diagnoses and give relief. There is no attempt made to produce experts, but each one before graduation must know enough about the specialized branches of medicine to be a competent general practitioner. The lectures upon the physiology of the organs of special sense delivered in the fall to the second-year class, must

also be attended by the seniors. These lectures serve as an introductory review of facts necessary for a proper knowledge of the specialties and obviate unnecessary repetitions by the different professors.

Every student must personally attend a definite number of cases of labor, and for this purpose the maternity service open to the college offers excellent opportunities. The faculty earnestly recommend that this work be accomplished in the summer preferably of the third year; by the proper choice of electives it is possible in the second summer, but this is not as desirable or profitable. If taken during the regular winter session much loss in other work may result. Those who for any proper reason cannot take this course as advised in the summer might, however, succeed in obtaining the necessary cases during the winter by selecting odd hours when not engaged in section work, and by arrangement with the office to receive telephone calls.

As in the previous year, there are the same electives in recitations for those who wish particularly to fit themselves for hospital and other competitive examinations. There is also offered an advanced course in neurology in a hospital devoted largely to the care of this class of patients. There will in addition be elective practical courses in the dispensary as opportunity arises.

DETAILS OF THE PLAN OF INSTRUCTION.

ANATOMY.

GEORGE WOOLSEY, M.D., *Professor of Anatomy.*
IRVING S. HAYNES, M.D., *Professor of Practical Anatomy.*
DR. WILLIAM F. STONE, *Instructor.*

Assistant Demonstrators of Anatomy,

DR. WILLIAM F. STONE, DR. JOHN A. HARTWELL,
DR. FRANK S. FIELDER, DR. JOHN F. CONNORS,
DR. ANDREW H. MONTGOMERY, DR. WILLIAM A. DOWNES,
DR. BURTON J. LEE.

Anatomy is taught in the first and second years by lectures, recitations, section demonstrations and laboratory courses, and by dissection. The course in anatomy is arranged to correspond as far as possible with the courses in physiology and histology.

Lectures in the first year are confined to the practical applied anatomy of the bones and joints, and follow the recitations on these subjects. In the second year the lectures are devoted to regional surgical anatomy, the students being already well grounded in descriptive anatomy.

One lecture a week is given during the first half of the second year by the Professor of Practical Anatomy on the development and gross anatomy of the nervous system, and the topographical anatomy of one of the extremities.

Descriptive Anatomy is taught by recitations, section demonstration, and laboratory courses and by dissection.

Recitations, from standard text-books, are held by the Instructor in Anatomy twice a week for each section of the first-year class and once a week for each section of the second-year class. Dur-

ing the first year the recitations are upon the bones, joints, muscles, arteries, veins, and a preliminary study of the central nervous system; during the second year upon the nervous system and the viscera.

PRACTICAL ANATOMY.

Section Demonstrations will hereafter be conducted as laboratory courses in which a given region is not only demonstrated but each member of the group is required to identify the structures on the part, specimen or model. They are conducted by the Professor and Assistant Demonstrators of Practical Anatomy twice a week for each section during the first half of the first year and the last half of the second year, and once a week during the rest of the first and second years. During the first three months of the first year the students are taught by section demonstrations on that part of the cadaver they are next to dissect; how to dissect, what to find, and where to find it. In addition, one preliminary demonstration is given weekly from October to January on the thoracic, abdominal, and pelvic viscera, to prepare students for the courses in physiology and histology by demonstrating the organs whose function and structure they are to study. In the last half of the first year the joints are demonstrated. In the second year the brain and nervous system, the organs of sense, the thoracic and abdominal viscera, and the perineum are demonstrated.

Dissection.—The course in dissection is arranged on a laboratory basis—that is, the students are required to dissect during certain specified hours each day while the demonstrators are in attendance. Twelve hours a week are assigned in the schedule for this anatomical laboratory course during the first and second year, and dissection is permitted at any time after 10 A.M. that the students are at leisure.

Two courses of dissection are required. The first course for first-year students comprises the dissection of three parts—the head and neck, and upper and lower extremities, including the joints. This course is begun after the recitations and section demonstrations have prepared each student for the part assigned to him.

The second course consists of the dissection of four parts and is designed for second-year students and those first-year students who have completed the first course. This course includes a review of the first course, with more particular attention paid to the minuter parts and, in addition, the dissection of the brain, the trunk, with the thoracic and abdominal viscera, and the perineum. A considerable part of the second course may be finished during the first year. This will afford time in the second year for additional and advanced work after completing the required parts. Students are examined and marked on the dissection of each part required. Prepared bones are loaned to students during the session from a large collection kept for this purpose.

Examinations.—A practical, in addition to a written, examination is held by the Professor of Anatomy at the end of the second year. At the end of the first year there is a written review or examination on the work of the year.

Advanced, Special, and Post-Graduate Courses.—Facilities are offered to students and the medical profession for pursuing advanced, special, and post-graduate courses in practical anatomy.

SUMMARY.*

	First Year.	*Second Year.*
Lectures	30 hours.	75 hours.
Demonstrations	45 hours.	45 hours.
Recitations	60 hours.	30 hours.
Dissection	288 hours.	240 hours.

EMBRYOLOGY.

Lectures	6 hours.
Laboratory	30 hours.

Text Book. Gerrish, second edition.

Collateral Reading—Morris; Gray; Quain; Woolsey, *Applied Surgical Anatomy;* Haynes, *Guide to Dissection* and *Manual of Anatomy.*

* This and the following summaries represent the total number of hours for each student.

PHYSIOLOGY.

Austin Flint, M.D., LL.D., *Professor of Physiology.*

Assistant Professor,
Dr. John A. Hartwell.

Instructor, *Assistants,*
Mr. Alvin W. Baird.

Instruction in this branch is given by systematic lectures and recitations, with practical demonstrations and exercises, to first-year students during the second half of the session, and to second-year students during the first half of the session. During the second half of the session, review recitations, covering the entire first-year and second-year courses, are held once a week for the second-year class by the instructor, as a preparation for the final college and the State examinations.

As a preparation for the study of physiology proper, first-year students, during the first half of the session, receive instruction in the gross anatomy of the thoracic and abdominal viscera, by section demonstrations in the department of Practical Anatomy. The histology of the heart and blood-vessels, respiratory organs, alimentary canal and glandular organs is taught in the laboratory and by recitations.

The regular second-year work in physiology is given during the first half of the session. Second-year students receive laboratory instruction in physiological chemistry in the department of Chemistry, Physics, and Toxicology. The same department gives instruction in optics and acoustics to first-year students, which serves as a preparation for the study of vision and audition in the second year. Second-year students receive laboratory instruction from the department of Histology in the histology of the nervous system and the organs of special sense. They also receive instruction from the department of Anatomy in the anatomy of the encephalon and cranial nerves.

Lectures.—The regular lectures for the first-year class begin about the middle of January, and are continued three times

weekly until the close of the session, on the following subjects and in the order named: The cell, blood, circulation, respiration, digestion and absorption, secretion and excretion, general metabolism, and animal heat and force. The regular lectures for the second-year class begin at the opening of the session, and are continued three times weekly until about the middle of January, on the following subjects and in the order named: The special senses, the nervous system, and embryology. Five lectures on embryology, given in January by Professor Flint, are devoted to the development of the ovum up to and including the formation of the membranes. Professor Gage, of Ithaca, gives six lectures in the middle of the term, profusely illustrated, on the development of systems and organs in the embryo and fœtus. The first nine lectures of the course devoted to the special senses are given to the second-year class and the fourth-year class together. Fourth-year students are thus enabled to review the physiology of the special senses as a preparation for the study of ophthalmology and otology.

Throughout the entire course, while the subject of human physiology proper is fully covered, special attention is paid to its applications to the practice of medicine and surgery, much time being devoted to what may be called applied physiology.

Recitations, Section Work, etc.—Certain of the work in the histological laboratory is practically a part of the instruction in physiology. For first-year students, this includes laboratory work and recitations on the cell and karyokinesis, ciliary movements, blood, the histology of the simple tissues, heart, and vessels, respiratory system, digestive system, glandular organs, and the cellular mechanism of secretion. For second-year students the instruction includes a study, in the same manner, of the nervous system, organs of special sense, and the genito-urinary system. The instruction in physiological chemistry is given in the department of Chemistry to second-year students. It includes lectures upon physiological chemistry, laboratory work, and recitations on the carbohydrates and fats, proteins and albuminoids, foodstuffs, and the digestive secretions, endosmosis and exosmosis, and the chemistry of blood, bile, urine, and the simple tissues.

In addition to the work in histology and physiological chemistry and in close connection with the lectures on physiology

proper, the Assistants give, three hours weekly, recitations, with frequent demonstrations and practical exercises, to each class, divided into sections of convenient size, for first-year students during the second half of the session, and for second-year students during the first half of the session. One additional hour is devoted weekly to demonstrations to each entire class of the subjects considered in the regular lectures for each week.

In the section-teaching, many demonstrations, by means of specimens, models, and apparatus, will be given, which cannot with advantage be made before the entire class, such as blood-counting, the capillary circulation, blood-pressure, the use of the sphygmograph, the general physiology of nerve and muscle, etc.

In the course of the section-work, students who prove themselves capable may be permitted to aid in the preparation and giving of the demonstrations when this does not interfere with other exercises, this corps of student-assistants being changed from time to time so that the privilege may be extended to as many as possible.

Summary.

	First Year.	*Second Year.*	*Fourth Year.*
Lectures	45 hours.	45 hours.	6 hours.
Demonstrations . .	30 hours.	30 hours.	
Recitations	45 hours.	45 hours.	

Text Book—Kirke's *Handbook of Physiology,* seventeenth edition.

Collateral Reading—Flint's *Physiology of Man;* Stewart; Foster.

CHEMISTRY, PHYSICS, AND TOXICOLOGY.

RUDOLPH A. WITTHAUS, M.D., *Professor of Chemistry.*

Assistant Professor,
DR. IVIN SICKELS.

Instructors,
DR. LOUIS W. RIGGS, DR. CHARLES G. L. WOLF.

Assistant,
R. H. MACUMBER.

Lectures.—Students of the first year will receive three lectures each week on physics, the divisions of the subject being considered in the following order: General properties of matter and force, mechanics, hydrostatics, pneumatics, optics, electricity, heat, and acoustics. The lectures will be abundantly illustrated, and the relations of physics to surgery and medicine will be particularly considered.

During the second year, students will attend two lectures weekly. Organic chemistry will be considered in the earlier part of the term to an extent sufficient to impart a knowledge of the principles of combination of the carbon compounds and the properties and relationships of those which are of physiological, toxicological, or therapeutical interest. The lectures during the latter part of the second year will be upon physiological chemistry.

During the third year one lecture will be given weekly on toxicology for twenty weeks. In these lectures the medical and medico-legal bearings of the subjects will be chiefly considered.

Recitation.— Students of the first year will recite twice each week on the principles of chemistry and mineral chemistry. Those of the second year will recite once weekly on organic and physiological chemistry.

Laboratory Work.—Laboratory instruction will be given students of the first year four hours weekly during the entire session.

This course will consist of an experimental study of the commoner elements and compounds in illustration of the recitation course, and of training in the processes of qualitative analysis of inorganic substances, and mineral poisons.

Students of the second year will receive laboratory instruction two hours weekly until February 14th, and four hours weekly after that date in physiological and clinical chemistry and organic toxicology.

Each student is fully supplied with all apparatus and chemicals required, except urinometers, which are carefully corrected for the student that they may serve for future use.

These courses are conducted by the Assistant Professor, and by the instructors under the direction of the Professor of Chemistry and Physics.

First-year students presenting satisfactory evidence of having performed equivalent work in chemistry and physics will be excused from first-year work in this department, and be given advanced laboratory work equivalent in hours to that omitted.

Summary.

	First Year.	*Second Year.*	*Third Year.*
Lectures	90 hours.	60 hours.	18 hours.
Recitations . . .	60 hours.	60 hours.	
Laboratory . . .	96 hours.	84 hours.	

Text Book—Witthaus, *Manual of Chemistry.*

Collateral Reading—Wolf, *Laboratory Handbook;* Ganot's *Physics.*

MATERIA MEDICA AND THERAPEUTICS.

HENRY P. LOOMIS, M.D.,
Professor of Materia Medica and Therapeutics.

Instructors,
DR. WARREN COLEMAN, DR. EDMUND P. SHELBY,
DR. WALTER ARTHUR BASTEDO, Ph.G.

Clinical Assistant,
DR. WILLIAM J. JONES.

Instruction is given in this department during the second, third, and fourth years by means of: 1. Lectures. 2. Clinical instruction. 3. Recitations. 4. Laboratory work.

Lectures.—These are given by the Professor twice a week to the third-year students and once a week to the fourth-year students. They are confined almost exclusively to therapeutics, as it is believed that materia medica can best be taught by recitations and by laboratory work.

The lectures to the third-year students will consider the therapeutic uses of the most important drugs from the standpoint of the drug itself, such as the methods of prescribing the drug and the conditions for which it is given; only so much of the physiological action of the drug will receive attention as will explain its therapeutic value.

The lectures to the fourth-year students will be confined almost exclusively to a consideration of the systematic treatment of the different diseases. The plan of treatment will be given in detail, with definite instruction as to the drugs to be used and the preparations which are most reliable.

Lectures will be given on remedial agents other than drugs, such as massage, dietetics, climatology, mineral waters, and hydrotherapy.

Clinical Instruction.—A new departure in the teaching of therapeutics will be made by affording the students of the third and fourth years opportunity to observe the effects of the different remedies on the natural course of diseases. To accomplish

this the classes will be divided into small sections and taken by the Professor into the wards of Bellevue Hospital. Actual practice is given in the employment and application of the various therapeutic agents used in medicine, such as the aspirator, leeches, cups, cautery, stomach-tube and stupes. The hydropathic establishment connected with this hospital is one of the most complete in the country. Here to small sections will be demonstrated the various applications of water to the treatment of disease—such as baths, packs, douches, etc. A professional masseur will show the technique of massage and the Swedish movements. The treatment of the different diseased conditions observed will be systematically studied, and opportunities will be given to the members of the class to make personal examination of the patient and to watch the modification of disease produced by the remedies prescribed. The clinical work of the third and fourth years affords abundant opportunities for further training in practical therapeutics. A general medical clinic will be held by the Professor once a week in the amphitheatre of Bellevue Hospital, at which special attention will be given to the treatment of the diseases under consideration.

Recitations.—Students of the third year will recite to the instructor twice a week from a standard text-book. During the fourth year a recitation will be held once a week on therapeutics. The recitations will embrace a study of the action of all the more valuable remedial agents in connection with the description of the drugs themselves.

Each student will be thoroughly drilled in prescription-writing and in the doses of the more important drugs.

Examinations will be held at stated times during the session by the Professor to enable him to judge of each student's progress.

Laboratory Work.—The laboratory of Materia Medica occupies two floors of the Loomis Laboratory building; it is provided with a complete assortment of crude drugs and with all the various preparations of the Materia Medica; also with appliances for instruction in the methods of manufacturing pharmaceutical preparations. The laboratory is equipped with instruments and appliances for special research in the physiological action of drugs. The large class room is supplied with sixty tables, equipped with gas, electric lights, water connections, and full apparatus,

enabling each student to work separately under the supervision of the instructors.

The course of laboratory instruction is taken during the second year, and consists of six hours each week for half the year. The class is divided into small sections, which are under the personal supervision of the instructors. The method of teaching is distinctly practical. The student is made familiar by the laboratory work with the physical and chemical properties of drugs. This course includes such subjects as the forms of drugs, their weight and bulk, the measurement of solid and fluid drugs, methods of administering medicines, particularly with reference to appropriate combinations, and the study of solubilities. The subject of incompatibilities is clearly demonstrated.

Prescription-writing is taught throughout the course, and test prescriptions are compounded by members of the class.

Summary.

	Second Year.	*Third Year.*	*Fourth Year.*
Lectures		47 hours.	30 hours.
Recitations . . .		60 hours.	30 hours.
Laboratory . . .	90 hours.		
Clinics		30 hours.	30 hours.
Sections		5 hours.	5 hours.

Text Book—White and Wilcox, *Materia Medica and Therapeutics.*

Collateral Reading—Coleman, *Syllabus of Materia Medica, American Text Book of Applied Therapeutics;* Thompson, *Practical Dietetics.*

MEDICINE.

W. Gilman Thompson, M.D., *Professor of Medicine.*

Professors of Clinical Medicine,

Alexander Lambert, M.D., Charles E. Nammack, M.D.,
Warren Coleman, M.D., Lewis A. Conner, M.D.

Instructors and Assistant Instructors,

Dr. C. N. Bancker Camac, Dr. Thomas Wood Hastings,
Dr. Montgomery H. Sicard, Dr. John W. Coe,
Dr. John Metcalfe Polk, Dr. Frederick L. Keays,
Dr. William R. Williams.

The Course of Medicine comprises a graded plan of study extending throughout three years. General didactic lectures upon the practice of medicine are wholly supplanted by bedside and dispensary instruction and recitations. The course includes the following subdivisions:

Second Year:

Recitations upon elementary medicine.

Third Year:

1. Recitations from an advanced text-book, with written reviews.
2. Physical diagnosis of the heart and lungs.
3. History-recording.
4. Bedside course in symptomatology.
5. Dispensary course in general medicine.
6. Clinical pathology.
7. Eighteen lectures on symptomatology.
8. Hospital medical clinics.

Fourth Year:

1. Advanced bedside study in symptomatology and diagnosis.
2. Demonstrations of patients by the student before the class in the out-patient clinic.
3. Physical diagnosis.
4. Hospital medical diagnosis clinics.
5. Medical conferences.
6. Twelve lectures upon diatheses, toxæmias, etc.

7. Elective advanced work in clinical diagnosis (clinical pathology, history-recording, etc.).
8. Recitations in medicine.

The details of the methods of instruction in medicine for each year of the curriculum are as follows:

Second-Year Students.

Recitations.—Second-year students begin the study of medicine with systematic recitations each week from an elementary text-book, in which the subjects of nomenclature, etiology, morbid anatomy, and typical symptoms only are dwelt upon.

Third-Year Students.

Recitations.—Third-year students recite twice each week from an advanced text-book on Practice of Medicine, special emphasis being given to symptomatology, complications, diagnosis, and treatment.

Written reviews are held at intervals to familiarize the student with examinations. All recitations are obligatory, and the recitation marks received form an important component of the final examination marks of the year.

Ward Work.—Systematic and obligatory ward work is begun in classes not exceeding fifteen students each, who accompany the Professors of Clinical Medicine on rounds through the hospital wards. Examples of all the common diseases are studied, and the student has opportunity to personally examine many cases of disease in different stages of development, and of following their daily progress. A special course in general medical diagnosis is given at the bedside, in which the student observes cases illustrating all the important physical examinations.

Clinical Laboratory Courses are conducted in immediate connection with the study of hospital and dispensary cases.

The laboratory is designed to meet the three requirements of: (1) *Teaching;* (2) *Original Research, and* (3) *Diagnosis.*

(1) *Teaching.* The third-year class is divided into small sections, so that each member receives the personal assistance of the demonstrator. At the conclusion of the course a written and prac-

tical examination is held, and the result of this, as well as the character of the work done by each student, is included in the general average received by him in medicine. When assigned to cases at the general medical clinic the fourth-year student is required to report the result of his examination of the sputum, blood, urine, etc.

The apparatus employed may readily be transported to the bedside, the work being thus essentially practical, and the student *himself* uses it so that he may become familiar with its care and application.

The course comprises the thorough study of the sputum, blood, gastric contents, fæces, urine, exudates and transudates.

Each student is furnished typical specimens which he stains and studies at the demonstrations.

2. *Original Research.* Facilities are offered to graduate and undergraduate special students for the undertaking and publication of original investigations.

(3) *Dispensary, Hospital, and Clinical Laboratory Examinations.* The laboratory is a working part of the Cornell dispensary. The visiting staff of this dispensary, as well as that of the adjacent hospital, use the laboratory extensively for completing the data of their cases. Students who have completed their third year, and whose standing is good, may, under the supervision of the instructors, employ their summer months in following this work in the laboratory.

Physical Diagnosis.—Physical diagnosis of the chest is taught in classes not exceeding a dozen students each. This course of 30 lessons for each class is very comprehensive, owing to the large number of patients in the class of heart and lung diseases at the college dispensary and in the wards of Bellevue Hospital.

General Medical Clinics.—Students of the third year are required to attend a clinic in general medicine conducted by Professor Lambert (commencing in December), and also the clinic in medical diagnosis conducted by Professor Thompson, and the clinic in general therapeutics by Professor Loomis, as described for the fourth year. These clinics are held weekly in the amphitheatre of Bellevue Hospital.

Lectures.—A course of eighteen lectures upon general symptomatology is given by the Professor of Medicine, which is de-

signed as introductory to the systematic bedside teaching which he conducts upon hospital rounds.

Fourth-Year Students.

Bedside Instruction is given by the Professor of Medicine to sections not exceeding fifteen students, in the wards of the Presbyterian Hospital until January 1st, and in those of Bellevue Hospital thereafter, throughout the year. In these sections each student is assigned in turn to special cases for thorough study. Ward classes are also conducted by Dr. Conner at the Hudson Street Hospital, and by Dr. Nammack in Bellevue Hospital.

Clinics.—Medical clinics are held weekly in the amphitheatre of Bellevue Hospital by the Professor of Medicine. At these clinics students read written histories of cases which they have studied on the previous day. They are required to demonstrate their findings upon the patient, and are questioned before the entire class in regard to diagnosis, etc. These clinics are also utilized by the Professor of Medicine to exhibit cases of exceptional rarity or difficult diagnosis. A second general medical clinic is held weekly in the Bellevue amphitheatre by the Professor of Therapeutics, at which the effects of treatment are made the prominent feature.

An out-patient clinic is also held weekly by the Professor of Medicine in the dispensary of the college, at which students are given ample opportunity to examine patients, study minor ailments, as well as all the forms of disease in the ambulatory cases of a large and varied clinical service. More than 5,000 cases were treated during the past year in this department alone of the dispensary.

Lectures.—A course of twelve lectures is given by the Professor of Medicine upon such general topics as the diatheses, toxæmias, immunity, autointoxication, cachexias, etc.

Medical Conferences.—Under Dr. Coleman's direction, students are assigned to special cases which they study in detail for several weeks, reviewing the literature of the subject, and which they then report in writing at a medical conference, at which their fellow-students are called upon to offer criticisms and general discussion.

An elective course in advanced clinical pathology and diagnosis is offered in the fourth year.

SUMMARY.

	Second Year.	*Third Year.*	*Fourth Year.*
Lectures		18 hours.	12 hours.
Recitations . . .	30 hours.	60 hours.	30 hours.
Clinics		46 hours.	66 hours.
Sections		35 hours.	48 hours.

CLINICAL PATHOLOGY.

Laboratory . . .	60 hours.
Recitations . . .	6 hours.

Text-Books—Thompson's *Practical Medicine;* Musser, *Medical Diagnosis.*

Collateral Reading—American System of Practical Medicine, Loomis-Thompson.

SURGERY.

LEWIS A. STIMSON, M.D., *Professor of Surgery.*

Professors of Clinical Surgery,

FREDERIC S. DENNIS, M.D., FREDERICK W. GWYER, M.D.,
GEORGE WOOLSEY, M.D., FRANCIS W. MURRAY M.D.,
FREDERICK KAMMERER, M.D., PERCIVAL R. BOLTON, M.D.,
ALEXANDER B. JOHNSON, M.D.

Instructors,

DR. JOHN ROGERS, JR., DR. BENJAMIN TILTON,
DR. ARCHIBALD E. ISAACS, DR. CHARLES L. GIBSON.

Assistants,

DR. GEORGE E. DODGE, DR. WILLIAM F. STONE,
DR. WILLIAM A. DOWNES.

Surgery will be taught in the recitation room, at the bedside, at hospital clinics, and by lectures.

In the second year the students are required to attend recitations on the principles of surgery two hours a week throughout the term. For this purpose the class is divided into small sections to insure thorough work; so far as time permits instruction will also be given at the bedside.

In the third year recitations are continued upon regional surgery; the class is instructed in sections in Bellevue Hospital in history-taking and methods of surgical examination and diagnosis, three hours a week for part of the term; and also two hours a week bedside instruction. Formal clinics are held in Bellevue, New York, and other hospitals; about thirty lectures will be given by the Professor of Surgery, and a clinic for diagnosis is held once a week for the first half of the term, and twice a week for the second half, at which the students are required personally to examine and report upon the cases.

In the fourth year the students will receive clinical instruction in small groups in several hospitals and dispensaries upon general surgery and the special branches—eye, ear, nose and throat, genito-urinary diseases, dermatology and orthopædics; may attend the lectures and clinics, and will have a review quiz in preparation for examination.

The members of the sections are trained in the examination of patients, the dressing of wounds and fractures, the administration of ether and assisting at operations.

The opportunities for the instruction in the special branches are exceptionally ample. There will be several clinical teachers in each subject, each with hospital and dispensary services. The student will be enabled directly to examine and study cases, and will have a certain choice as to the time given to each branch.

In addition to the clinics at Bellevue and the New York hospitals specified above, Professors Murray and Gibson will give clinics at St. Luke's and the General Memorial hospitals at dates to be announced during the session.

Operative Surgery will be taught to small sections of the class in the fourth year. The course consists of recitations, work upon the cadaver, and bandaging. As the material is abundant, each member of the class will perform the principal surgical operations.

Special instruction in operative surgery is offered to grad-

uates in medicine. A circular giving particulars may be had on application to the Secretary.

SUMMARY.

	Second Year.	*Third Year.*	*Fourth Year.*
Lectures . . .		30 hours.	30 hours.
Recitations . . .	60 hours.	60 hours.	
Clinics		104 hours.	104 hours.
Sections		25 hours.	25 hours.
Operative Surgery .			60 hours.

Text-Book—Tillman.

Collateral Reading—American Text-Book; Parks' *Surgery;* Stimson's *Fractures and Dislocations;* Stimson's *Operative Surgery;* Dennis, *System of Surgery.*

OBSTETRICS.

J. CLIFTON EDGAR, M.D., *Professor of Obstetrics and Clinical Midwifery.*

Instructors,

DR. RUSSELL BELLAMY,
DR. GEORGE D. HAMLEN,
DR. GUSTAVE SEELIGMANN,
DR. GEORGE G. WARD,
DR. ALBERTUS A. MOORE,
DR. I. L. HILL.

Instruction in obstetrics will be given during the second, third, and fourth years by—

1. Recitations. 2. Illustrative lectures. 3. Obstetric clinics and conferences. 4. Attendance upon cases of confinement. 5. Manikin practice and section work. 6. Obstetric histology, pathology, and bacteriology.

1. **Recitations** from a standard text-book will be held by an instructor in obstetrics during the second year upon the physiology, and during the third upon the pathology, of obstetrics, the latter including obstetric surgery.

These recitations are so scheduled as to cover the entire field of the subject laid out for the college year, are supplementary to the work of the Professor of Obstetrics during each of these two years, and prepare the student for an intelligent appreciation of his subsequent illustrative lectures, obstetric conferences, attendance upon cases of confinement, clinics, and manikin practice.

2. The Illustrative Lectures comprise a systematic course, running through the third year, upon the physiology and pathology of obstetrics.

These lectures are theoretical to a limited extent only, being mainly demonstrative and illustrative in character. To this end ample blackboard space is used, as well as an abundant collection of pelves, entire, normal and deformed, mesial sections of the same, and in addition a supply of diagrams, charts, carefully selected plaster, composition, and metal models, wet and dry preparations, and instruments.

In conjunction with these lectures additional recitations are held by the Professor of Obstetrics upon the subject-matter of the college year and for final review.

3. Obstetric Clinics and Conferences.—A weekly obstetric clinic is held a portion of the year for both the third- and fourth-year classes. At this clinic abnormal cases of pregnancy, labor, and the puerperium are demonstrated, and the major and minor obstetric operations performed.

In addition, infant feeding and the care of mother and child during the lying-in period and early infancy are taught. During both the third and the fourth year, members of the class will be called upon in rotation to examine patients and discuss etiology, diagnosis, prognosis, and treatment. These "obstetric conferences" will review the illustrative lectures, manikin work, and the student's work in his attendance upon confinement cases. By this means each individual student's standing in the department of obstetrics is ascertained. During the latter half of the second year six obstetric clinics are given at the hospital. Attendance upon these clinics is optional.

4. Attendance upon Cases of Confinement.—Each candidate for the degree of M.D. is required to present satisfactory evidence to the effect that he has attended a definite number of cases of confinement.

During the student's attendance upon his practical maternity course he may be excused from the exercises of the College during the fourth college year, otherwise he shall take his practical obstetric course during vacation time. Students will attend confinement cases under the supervision of the clinical instructors, and may obtain further information concerning their practical obstetric work by applying at the Secretary's office.

5. Manikin Practice and Section Work.—Manikin practice is given to sections of the class during the fourth or senior year, and consists of work by individual students upon the manikins, under the supervision and criticism of an instructor.

The mechanical phenomena of labor; modes of delivery; abnormal presentations and positions, with methods of delivery of each; version; application of the forceps, and other manipulations, will be demonstrated by the instructor and performed by the student.

Diagrams, models, casts, wet and dried specimens, will be used in the demonstrations.

The sections will also be instructed at the bedside in the management of pregnant and parturient women, the care of the newborn child, abdominal palpitation, and pelvic mensuration.

6. Obstetric Histology, Pathology, and Bacteriology.—Laboratory instruction is given during the third year by the Professor of Pathology upon the histology of the vulva, vagina, uterus, ligaments, Fallopian tubes, and ovaries in the pregnant and non-pregnant conditions, and upon the histology and pathology of the decidua, chorion, placenta, and umbilical cord.

SUMMARY.

	Second Year.	*Third Year.*	*Fourth Year.*
Lectures		25 hours.	25 hours.
Recitations . . .	30 hours.	30 hours.	
Clinics		30 hours.	30 hours.
Sections		15 hours.	

Text-Book—Edgar's *Practice of Obstetrics.*
Collateral Reading—Jewett's *System of Obstetrics.*

GYNÆCOLOGY.

WILLIAM M. POLK, M.D., *Professor of Obstetrics and Gynæcology.*

Instructors,

DR. GEORGE D. HAMLEN, DR. CHARLES C. BARROWS,
DR. GEORGE G. WARD, JR., DR. JOHN ASPELL,
DR. WILLIAM TRAVIS GIBB.

Instruction in gynæcology is given by recitations, lectures, ward- and class-room demonstrations, clinics, and laboratory demonstrations.

Six Lectures, upon topics selected for their special interest and importance to the subject as a whole, will be given at the beginning of the fourth year.

Recitations are planned to cover the entire subject, and are held one hour a week during the third year of the course. In order that the instruction throughout the department may be as nearly in unison as possible, a synopsis of the subject-matter of each lesson is prepared by the instructor and amended and revised by the head of the department. This is presented to the student for comparison with his text-book, to which it is an addendum. This method insures the coöperation of the head of the department in the groundwork of his subject and enables him to keep in touch with each student until his graduation.

Class-room and Ward Demonstrations are given to sections of the fourth-year class twice a week throughout the year. This instruction includes the examination of patients by the students, who are thereby drilled in the methods of physical diagnosis as applied to the pelvis. When necessary the patients are anæsthetized.

The routine of treatment appropriate to the various conditions found is demonstrated, the students assisting when possible. In this way, not only is familiarity acquired with normal conditions within the pelvis and the various departures from this state induced by disease, but opportunity is afforded to see and put in

actual practice measures of relief and to watch the subsequent course and treatment of these cases.

Operations are performed three days every week at which the several sections are enabled to study the detail of every operation peculiar to this department.

A General Clinic is held once a week at which students selected in rotation are required to examine the patient, make a diagnosis, and suggest treatment. They are questioned before the class upon all these topics, as they relate to the case in hand, so as to determine the correctness of their conclusions. Should operation be called for, it is then performed.

Laboratory Demonstrations of secretions, discharges, and specimens obtained from patients who come under observation during this course are made to sections of the third-year class as a part of the course in clinical pathology.

SUMMARY.

	Third Year.	*Fourth Year.*
Lectures	6 hours.	6 hours.
Recitations		30 hours.
Clinics	30 hours.	30 hours.
Sections.		10 hours.

Text-Book—Penrose, *Gynæcology.*

Collateral Reading—Dudley's *Gynæcology;* Kelly's *Operative Gynæcology.*

DEPARTMENT OF PATHOLOGY.

INCLUDING HISTOLOGY, GROSS AND MICROSCOPICAL PATHOLOGY, AND BACTERIOLOGY.

JAMES EWING, M.D., *Professor of Pathology.*

DR. BERTRAM H. BUXTON, *Associate Professor of Experimental Pathology.*

DR. JEREMIAH S. FERGUSON, *Instructor in Histology.*

DR. OTTO H. SCHULTZE, *Instructor in Gross Pathology.*

DR. MAX G. SCHLAPP, *Instructor in the Histology and Pathology of the Nervous System.*

Dr. Letchworth Smith, *Instructor in Bacteriology.*
Dr. James C. Johnston, *Instructor in Pathology.*
Dr. Alfred E. Thayer, *Assistant Instructor in Gross Pathology.*
Dr. William J. Elser, *Assistant Instructor in Pathology.*
Dr. Israel Strauss, *Instructor in Embryology.*
Dr. Henry T. Lee, *Assistant Instructor in Pathology.*
Dr. Guy D. Lombard, *Assistant Instructor in Histology.*
Dr. Henry S. Pascal, *Assistant Instructor in Histology.*
Dr. J. C. Roper, *Assistant Instructor in Histology.*
Dr. Edgar Dinkelspiel, *Fellow in Experimental Pathology.*

HISTOLOGY.

The work in this subject is conducted throughout the first and during a portion of the second year by laboratory exercises and by recitations. Laboratory exercises, in two two-hour sessions weekly during the first year, and one two-hour session weekly during the second year, occupy in all about 150 hours for each student. The work covers the construction and use of the microscope, the methods of preparing microscopical sections of tissues, and the normal histology of the various tissues and organs of the human body. Attention is constantly directed to the application of the knowledge to physiological phenomena, and to further this end the courses in physiology and histology proceed as far as possible in unison. When desirable the structure of human tissues and organs is illustrated by sections of embryonal and lower vertebrate tissues.

In the first year the blood and simple tissues, the gastro-intestinal tract and adnexa, and the respiratory, circulatory, and genito-urinary organs are studied. In the second year the organs of the special senses and the nervous system are considered.

Recitations.—One recitation weekly for each student is held during the first year, and the first half of the second year, on subjects assigned from the text-book on histology. These recitations are designed to completely familiarize the student with the structure of the tissues considered during the previous week in the laboratory exercises.

An examination is held at the end of each year. The standing

of the student in this, as in the other subjects, is determined equally from the work in the laboratory exercises and in the recitations.

EMBRYOLOGY.

In the latter half of the second year, a series of topics in embryology, which have special importance in medicine and pathology, are presented in a laboratory course, occupying about 40 hours for each student. These topics embrace the fertilization and maturation of the ovum, formation of germ layers, and the main facts regarding the development of the different systems and viscera. These topics are illustrated by microscopical sections, charts, lantern slides, and models.

PATHOLOGY.

The course of instruction in pathology in the second year comprises a preliminary course of lectures on the theory and classification of inflammations, which is designed to acquaint the student with the main facts in this field, to prepare him for preliminary studies in medicine and surgery, and to establish a uniform system of nomenclature to be used in this and other departments. During one half the second year, also, attendance is required at one weekly demonstration in gross pathology, at which the more common visceral lesions are exhibited. This course is designed to accompany the preliminary recitations in medicine and surgery of the second year.

The main branches of the subject are grouped in the third year in order to secure the simultaneous study of the gross and microscopical changes in diseased tissues. In the fourth year the students perform autopsies, and attend one recitation weekly in review of the entire subject.

Microscopical Demonstrations in Pathology.—The microscopical demonstrations occupy three two-hour sessions weekly throughout the year, in all about 175 hours. The specimens studied illustrate the topics of inflammation, tumors, autointoxications, infectious diseases and diseases of the nervous system,

and are supplemented by lectures, and special demonstrations by means of sections, charts, lantern slides, and micro-photographs.

Demonstrations in Gross Pathology.—On the days alternating with the microscopical studies demonstrations of gross pathological specimens are given to the students of the third year, with the material collected from autopsies. With the viscera of each case is presented an epitome of the clinical history, and, when necessary, frozen sections of the organs, and the clinical symptoms are explained from the gross and microscopical changes in the altered tissues. The student here sees the viscera of many of the fatal cases which he has studied in the wards of the hospital.

Gross pathological diagnosis is taught as a separate branch of this subject, not bearing directly on the clinical aspect of the case.

These demonstrations occupy three two-hour sessions weekly, each section of the class attending one exercise weekly throughout the year.

Post-Mortem Examinations.—Students of the fourth year are required to perform autopsies under the direction of the instructor in gross pathology, when they are made familiar with the technical procedures required in ordinary and in medico-legal cases.

Recitations.—One recitation weekly is required of each student throughout the third and fourth years. In the third year they cover the work of each preceding week. In the fourth year they cover the entire work of the department.

Experimental Pathology.—During the past year definite plans have been formed to facilitate experimental studies in the Department of Pathology. The direct object of the plans is to associate together a number of competent workers whose time shall be entirely devoted to the study of new problems in medical science.

Abundant space and modern facilities have been provided for experimental work in cellular pathology, bacteriology, and physiological chemistry, and are available to approved applicants who desire to engage in this work, under the immediate direction of Professor Buxton. Dr. Dinkelspiel has been appointed a mem-

ber of this staff, and further appointments in the several branches involved will be made according to the requirements of the work undertaken.

It is the ultimate object of the present plans to increase the number of these workers and enlarge their facilities until they shall form a fully equipped institution of experimental medicine.

BACTERIOLOGY.

The laboratory course in bacteriology occupies three two-hour sessions each week for one-half of the second year—in all, ninety hours for each student. The student is first made familiar with the methods of disinfection, and is required to prepare the ordinary culture media. The work then proceeds to the methods of staining and examining bacteria; their artificial cultivation and the study of biological characters; the methods employed in the separation of species; the general relation of pathogenic bacteria to disease; and concludes with the biological analysis of air, water, soil, and milk. Cultures are made from the viscera of cases of the various infectious diseases, and the student is required to cultivate and identify the important pathogenic microorganisms. The work is supplemented when necessary by the use of pure cultures, by the exhibition of anærobic cultures, and to a limited extent by inoculation in animals.

An Advanced Course in bacteriology is offered to those students who have been able in the first year to attend the course required in the second year.

This course includes the cultivation of other pathogenic microorganisms, the separation of species, and the bacteriological examination of viscera secured at autopsies.

Advanced Courses and Original Research.—The abundant facilities of the laboratory on the fourth floor of the new building can be offered to properly qualified students and practitioners of medicine who wish to pursue advanced courses of study on lines of original research, under the direction of special instructors.

SUMMARY.

	First Year.	*Second Year.*	*Third Year.*	*Fourth Year.*
Histology:				
Recitations .	60 hours.	30 hours.		
Laboratory .	120 hours.	60 hours.		
Pathology:				
Lectures . .		10 hours.		
Laboratory .			180 hours.	
Recitations .			30 hours.	30 hours.
Gross Pathology:				
Laboratory .		30 hours.	60 hours.	30 hours.
Bacteriology:				
Laboratory .		90 hours.		

Text-Books: Histology—Stohr, *Text-Book of Histology.*

Pathology—Delafield and Prudden, *Pathological Anatomy and Histology.*

Bacteriology—Sternberg, *Manual of Bacteriology.*

Clinical Diagnosis—V. Jaksch, *Clinical Diagnosis.*

Collateral Reading—Bohm, Davidoff and Huber, *Text-book of Histology;* Orth, *Pathological Diagnosis;* Ziegler, *General Pathology;* Muir and Ritchie, *Manual of Bacteriology;* Ewing, *Pathology of the Blood.*

SPECIAL DEPARTMENTS OF MEDICINE AND SURGERY.

DISEASES OF CHILDREN.

JOSEPH E. WINTERS, M.D., *Professor of Diseases of Children.*

Instructors,

DR. WALTER A. DUNCKEL, DR. WILLIAM SHANNON.

Assistants,

DR. ROBERT S. ADAMS, DR. HORACE S. STOKES,
DR. SAMUEL M. EVANS, DR. LESTER M. HUBBY,
DR. ELISHA M. SILL.

This department will embrace clinical instruction and section teaching in all the important diseases of infancy and childhood.

There will be one clinical lecture each week in the college building, and clinical lectures in the Willard-Parker Hospital on scarlet fever and diphtheria.

In connection with the dispensary of the Children's Department in the college building there is an amphitheatre for section teaching, and isolation rooms for contagious diseases, so that students have ample opportunity for the personal study of disease.

Two hours each week will be devoted to section teaching in the dispensary to the students of the fourth year.

Students will be required to examine sick children and discuss the diagnosis and treatment of patients assigned to them.

Special attention is given to the hygiene and feeding of infants; the digestive disorders of infants; the dietetics of childhood and the food disorders of infancy and childhood; the anatomical and physiological peculiarities of infancy and childhood; and the influence these peculiarities have on the manifestations of disease in children.

One of the distinguishing features of this department will be the instruction of each student in the art of diagnosis, by the professor in charge.

There will be practical bedside illustrations of the manage-

ment, care, and therapeutics of all the acute diseases of infancy and childhood.

In the clinical laboratory microscopical examinations will be made of secretions and excretions, of lesions of the mouth and throat, and of sections of anatomical lesions of the important diseases of childhood.

SUMMARY.

	Third Year.	*Fourth Year.*
Clinics	30 hours.	30 hours.
Sections		10 hours.

Text-Book—Williams, *Medical Diseases of Infancy and Childhood.*

Collateral Reading—Starr, *American Text-Book of the Diseases of Children.*

SURGICAL DISEASES OF THE GENITO-URINARY ORGANS.

SAMUEL ALEXANDER, M.D., *Professor of Genito-Urinary Surgery.*

Instructor,
DR. FRANCIS C. EDGERTON.

The course is required of students during the third and fourth years, and is designed to give instruction in diagnosis and treatment of the surgical diseases of the male genital and urinary organs and in syphilis. It consists in recitations, lectures, clinics, and section work in the dispensary of the college and in the wards of Bellevue Hospital.

Recitations.—Recitations are held during the third and fourth years by the instructors in the department of general surgery.

Lectures.—One lecture a week from the opening of the term to the first of December will be given by Professor Alexander at the college. These lectures will be principally devoted to the subject of syphilis. A syllabus of these lectures will be furnished to each member of the class.

Clinic.—A clinic will be given in the amphitheatre of Bellevue Hospital once each week after the first of January by Professor Alexander. At this clinic the principal operations upon the male

urinary and genital organs will be performed before the class, and special attention will be given to the subject of diagnosis and post-operative management of cases. Attendance upon these clinics is required by students during the third and fourth years.

Section Teaching at the College Dispensary and at Bellevue Hospital.—The third-year class will be divided into sections of small size, and instruction will be given by the Chief of Clinic and the instructors in the college dispensary. Special attention will be given in this course to the diagnosis and treatment of the venereal diseases and the use of special instruments.

The fourth-year class will be divided into sections of small size, and instruction will be given in the wards of Bellevue Hospital or in the college dispensary by Professor Alexander or the Chief of Clinic. This course will be devoted principally to the diseases of the urinary organs and to instruction in the use of special instruments and apparatus and the post-operative treatment of cases.

SUMMARY.

	Third Year.	*Fourth Year.*
Clinics	18 hours.	18 hours.
Sections	15 hours.	10 hours.
Lectures		6 hours.

Text-Book—White and Martin.

Collateral Reading—Hyde and Montgomery, Keyes and Chetwood.

NERVOUS DISEASES.

CHARLES L. DANA, M.D.,
Professor of Diseases of the Nervous System.

Instructor,
DR. JOSEPH FRAENKEL.

Assistants,
DR. ROBERT M. DALEY, DR. J. RAMSAY HUNT,
DR. LESLIE J. MEACHAM.

The regular work consists of a preliminary series of lectures by Professor Dana, in which the general outline of the work for

the year is given, with demonstrations of the general anatomy, general symptomatology, and methods of examination of the nervous system. During the rest of the term clinical lectures on nervous diseases are held weekly in the amphitheatre of Bellevue Hospital or at the college. Section work is given weekly to classes in the wards of Bellevue Hospital, and three times a week in the dispensary of the college. In this dispensary, section-work instruction is given in history-taking in the examination of patients, and in electro-therapeutics.

It is considered of the greatest importance that the student of nervous diseases be thoroughly grounded in the anatomy and physiology of the nervous system, therefore courses in gross and microscopical anatomy of the nervous system are provided in the histological laboratory. Special students can also take courses on the pathology of the nervous system.

Thus the course of instruction aims to provide the student before he graduates with instruction in the microscopical anatomy of the nervous system, in its physiology and pathology, and also that he shall receive practical clinical instruction in the amphitheatre, at the bedside, and in the dispensary.

SUMMARY.

	Third Year.	*Fourth Year.*
Lectures	5 hours.	
Clinics	20 hours.	20 hours.
Sections	15 hours.	5 hours.

Text-Book—Dana, *Diseases of the Nervous System.*

Collateral Reading—Gower's *Diseases of the Brain and Spinal Cord;* Dercum, Obersteiner, *Anatomy of the Nervous System.*

MENTAL DISEASES.

Professor of Mental Diseases.

Instructor,
DR. WILLIAM HIRSCH.

The Professor of Mental Diseases and Dr. Hirsch will give a series of clinical and didactic lectures once a week for two

months, fully illustrated. Clinics will also be given at the Manhattan State Hospital on Ward's Island during the course.

Instruction will also be given in diagnosis, the legal commitment of the insane, and the relations of insanity to medical jurisprudence.

SUMMARY.

	Fourth Year.
Lectures	5 hours.
Clinics	10 hours.

Text-Book—Regis-Berkley, *Mental Diseases.*

Collateral Reading—Tuke's *Dictionary of Psychological Medicine.*

DERMATOLOGY.

GEORGE T. ELLIOT, M.D., *Professor of Dermatology.*

Instructor,

DR. JAMES C. JOHNSTON.

Instruction in Dermatology will be given by the Clinical Professor and his assistants. No teaching will be given didactically, but the cutaneous diseases will be demonstrated on the living subject. Abundance of material for such instruction is obtainable, and the student can thoroughly familiarize himself with the more common as well as with the rarer diseases of the skin by actual personal contact and observation. Attention is particularly paid to the diagnosis and the etiology of skin diseases, but their therapeutics also receive due consideration.

SUMMARY.

	Fourth Year.
Sections	25 hours.

Text-Book—J. Nevins Hyde, *Dermatology.*

Collateral Reading—H. Radcliffe Crocker, third edition.

LARYNGOLOGY AND RHINOLOGY.

CHARLES H. KNIGHT, M.D., *Professor of Laryngology.*

Instructor,

DR. JAMES E. NEWCOMB.

Assistants,

DR. FRANK T. BURKE, DR. WALTER C. MONTGOMERY,
DR. CHARLES MACK, DR. EDWARD J. CONNELL.

Instruction in Laryngology and Rhinology is given by clinical lectures at the college by the Professor of the department. The subjects then considered are demonstrated to the fourth-year students by the instructor and by the assistants. The class is divided into sections, and each member is expected to examine patients and perform manipulations. The clinics are fully illustrated by plates and models, and, as far as possible, by clinical material.

SUMMARY.

	Fourth Year.
Lectures	18 hours.
Sections	15 hours.

Text-Book—Knight, *Diseases of the Nose and Throat.*

Collateral Reading—Grünwald, *Atlas of Diseases of the Larynx;* Grünwald, *Atlas of Diseases of the Mouth, Pharynx and Nose.*

OPHTHALMOLOGY.

CHARLES STEDMAN BULL, M.D., *Professor of Ophthalmology.*

Instructors,

DR. ROBERT G. REESE, DR. ALEXANDER DUANE.

Instruction in Ophthalmology consists in lectures at the college building once a week, during the months of October, November,

and December, and in sectional teaching two hours a week at the college dispensary throughout the year. The weekly lectures at the college are didactic, and consider the subjects of the theory of the ophthalmoscope, refraction and accommodation, the anomalies of the ocular muscles, and the deep lesions of the eye which are not susceptible of clinical demonstration. Thus the entire field of ophthalmology is covered. The sectional teaching at the college dispensary is devoted partly to clinical ophthalmology and the use of the ophthalmoscope, and partly to instruction in the errors of refraction and the rudiments of the fitting of lenses.

SUMMARY.

	Fourth Year.
Clinics	10 hours.
Sections	20 hours.

Text-Book—Noyes.

Collateral Reading—De Schweinitz, Swanzy, Jackson, Nettleship.

OTOLOGY.

GORHAM BACON, M.D., *Professor of Otology.*

Instructors,

DR. FRANKLIN M. STEPHENS, DR. GEORGE SLOAN DIXON.

During the first third of the fourth year a systematic course of weekly lectures is given. These lectures are practical in character, including a consideration of the anatomy and physiology of the ear and the various methods of examination. Patients are shown to the class in order to familiarize the students with the symptoms and character of the more important diseases.

For clinical instruction in the dispensary, the fourth-year class is divided into sections. Each student receives practical instruction from Professor Bacon and his assistants in the examination of patients, the use of the otoscope, and the various methods of testing the hearing. The student is permitted to examine patients and, after a probationary period, to prescribe for them

and thus gradually assume the duties of a clinical assistant. The students also have an opportunity of witnessing the more important operations in aural surgery, including intracranial complications.

SUMMARY.

	Fourth Year.
Clinics	8 hours.
Sections	15 hours.

Text-Book—Bacon on the Ear.

Collateral Reading—Politzer, *Diseases of the Ear;* Macewen, *Pyogenic Infective Diseases of the Brain and Spinal Cord.*

ORTHOPÆDIC SURGERY.

NEWTON M. SHAFFER, M.D., *Professor of Orthopœdic Surgery.*

Instructors,

DR. P. HENRY FITZHUGH, DR. JOHN MCGAW WOODBURY.

Assistants,

DR. HENRY SCOTT, DR. DEAS MURPHY,
DR. FANEUIL S. WEISSE.

The course of study in the Orthopædic Department includes a stated clinical lecture once a week, with detailed demonstrations in sectional work twice a week during two months of the year.

During the regular clinical course especial attention is given to the early recognition of the deforming diseases of childhood, also to the symptomatology, pathology, and differential diagnosis of chronic and progressive deformities, including the mechanical and operative treatment.

In detail, the course consists of practical illustrations of methods of treatment, the apparatus used being thoroughly explained both in construction and in principle, attention being called to even minute points of construction and use. The operative side is fully dwelt upon, the indications for operative interference as an adjunct to the mechanical work being demonstrated.

Ample clinical material is provided, and models of conventional forms of apparatus are placed at the disposal of students.

In the section and laboratory work the student is required to assist in the management of selected cases, to familiarize himself with the various methods of treatment, to construct the simpler forms of apparatus, to secure a practical knowledge of the details of construction of the more complicated instruments, and to familiarize himself with the pathological conditions existing in the deformities of childhood.

SUMMARY.

	Fourth Year.
Clinics	10 hours.
Sections	10 hours.

Text-Book—Bradford and Lovett.

DEPARTMENT OF HYGIENE.

WILLIAM R. WILLIAMS, M.D., *Lecturer.*

Instruction is given in this course to fourth-year students by lectures, demonstrations and conferences, to supplement a text-book, one hour a week for half of the year.

The course is designed to help physicians in a practical way in their efforts to cope with preventable disease.

The hygienic relations of foods, water, clothing, schools, dwellings, climate and especially of youth and the transmissible diseases are studied from the viewpoint of the practical physician.

SUMMARY.

	Fourth Year.
Lectures	15 hours.

Text-Book—Egbert, *Hygiene and Sanitation.*
Collateral Reading—Notter, *Theory and Practice of Hygiene.*

SUMMARY OF THE PLAN OF INSTRUCTION.

The right is reserved to make amendments to this curriculum as experience may prove necessary.

The hours stated indicate the number of hours assigned to each student.

FIRST YEAR.

Anatomy.

Lectures, one hour weekly..... 30 hours.
Demonstrations, 1½ hours weekly..... 45 hours.
Recitations, 2 hours weekly..... 60 hours.
Dissection, 12 hours weekly, 24 weeks.....288 hours.

Physiology.

Lectures, 3 hours weekly, half term..... 45 hours.
Laboratory Demonstrations, 1 hour weekly..... 30 hours.
Recitations, 3 hours weekly, half term..... 45 hours.

Chemistry.

Recitations, 2 hours weekly..... 60 hours.
Laboratory, 4 hours weekly, 18 weeks..... 72 hours.
Laboratory, 2 hours weekly, 12 weeks..... 24 hours.

Physics.

Lectures, 3 hours weekly..... 90 hours.

Histology.

Laboratory, 4 hours weekly.....120 hours.
Recitations, 2 hours weekly..... 60 hours.

Electives.

Laboratory Pharmacology.
Physiological Chemistry.
Bacteriology.

These elective courses are open to certain advanced students as described on page 39 of the announcement.

In the course of the session one written review is held in the subjects recited upon. The papers are examined by the professors of the respective branches.

SECOND YEAR.

Anatomy.

Lectures, 2 hours weekly	60 hours.
Demonstration Lectures, 1 hour weekly, 15 weeks	15 hours.
Demonstrations, 1½ hours weekly, 30 weeks	45 hours.
Recitations, 1 hour weekly	30 hours.
Dissection, 10 hours weekly, 24 weeks	240 hours.
Lectures on Embryology	6 hours.
Laboratory Embryology, 2 hours weekly, 15 weeks	30 hours.

Physiology.

Lectures, 3 hours weekly, half term	45 hours.
Recitations, 3 hours weekly, half term	45 hours.
Laboratory Demonstrations, 1 hour weekly	30 hours.

Organic and Physiological Chemistry.

Physiological.

Laboratory, 2 hours weekly	60 hours.
Laboratory, 2 hours weekly, 12 weeks	24 hours.

Organic.

Lectures, 2 hours weekly	60 hours.
Recitations, 2 hours weekly	60 hours.

Pharmacology.

Laboratory, 6 hours weekly, 15 weeks	90 hours.

Bacteriology.

Laboratory, 6 hours weekly, 15 weeks	90 hours.

Histology.

Laboratory, 2 hours weekly..... 60 hours.
Recitations, 1 hour weekly..... 30 hours.

Pathology.

Lectures ..... 10 hours.
Gross, Pathology Laboratory, 1 hour weekly..... 30 hours.

Medicine.

Recitations, 1 hour weekly..... 30 hours.

Surgery.

Recitations, 2 hours weekly..... 60 hours.

Obstetrics.

Recitations, 1 hour weekly..... 30 hours.

Electives.

Bacteriology.
Materia Medica Recitations of the Third Year.
Manikin Course in Obstetrics.
Obstetrical Clinic.

The conditions under which certain students may avail themselves of these electives are stated on page 40 of the announcement.

THIRD YEAR.

Medicine.

Lectures, 3 hours weekly, 6 weeks..... 18 hours.
Clinics, 1 hour weekly..... 30 hours.
Clinics, 1 hour weekly, 16 weeks..... 16 hours.
Recitations, 2 hours weekly..... 60 hours.
Section Work, 3 hours weekly, 10 weeks..... 30 hours.
Section Work, 1 hour weekly, 5 weeks..... 5 hours.

Surgery.

Lectures, 3 hours weekly, 10 weeks..... 30 hours.
Clinics, 2 hours weekly, 9 weeks..... 18 hours.
Clinics, 1 hour weekly..... 30 hours.

Clinics, 1 hour weekly, 8 weeks..... 8 hours.
Clinics, 1 hour weekly, 18 weeks..... 18 hours.
Clinics, 1 hour weekly..... 30 hours.
Recitations, 2 hours weekly..... 60 hours.
Section Work, 3 hours weekly, 5 weeks..... 15 hours.
Section Work, 2 hours weekly, 5 weeks..... 10 hours.

Therapeutics.

Lectures, 1 hour weekly..... 30 hours.
Lectures, 1 hour weekly, 17 weeks..... 17 hours.
Clinics, 1 hour weekly..... 30 hours.
Section Work, 1 hour weekly, 5 weeks..... 5 hours.

Materia Medica.

Recitations, 2 hours weekly..... 60 hours.

Pathology.

Laboratory, 6 hours weekly.....180 hours.
Recitations, 1 hour weekly..... 30 hours.

Gross Pathology.

Laboratory, 2 hours weekly..... 60 hours.

Clinical Pathology.

Laboratory, 2 hours weekly..... 60 hours.
Recitations, 1 hour weekly, 6 weeks..... 6 hours.

Obstetrics.

Lectures, 1 hour weekly, 25 weeks..... 25 hours.
Clinics, 1 hour weekly..... 30 hours.
Recitations, 1 hour weekly..... 30 hours.
Section Work (manikin), 3 hours weekly, 5 weeks. 15 hours.

Gynæcology.

Lectures ..... 6 hours.
Clinics, 1 hour weekly..... 30 hours.

Toxicology.

Lectures, 1 hour weekly, 18 weeks..... 18 hours.

Diseases of Children.

Clinics, 1 hour weekly..... 30 hours.

Genito-Urinary Surgery.

Clinics, 1 hour weekly, 18 weeks..... 18 hours.
Section Work, 3 hours weekly, 5 weeks..... 15 hours.

Neurology.

Lectures ..... 5 hours.
Clinics, 1 hour weekly, 20 weeks..... 20 hours.
Section Work, 3 hours weekly, 5 weeks..... 15 hours.

FOURTH YEAR.

Medicine.

Lectures, 1 hour weekly, 12 weeks..... 12 hours.
Clinics, 1 hour weekly..... 30 hours.
Clinics, 1 hour weekly..... 30 hours.
Clinics, 1 hour weekly, 6 weeks..... 6 hours.
Recitations, 1 hour weekly..... 30 hours.
Section Work, 2 hours weekly, 5 weeks..... 10 hours.
Section Work, 1 hour weekly, 5 weeks..... 5 hours.
Section Work, 2 hours weekly, 5 weeks..... 10 hours.
Section Work, 3 hours weekly, 5 weeks..... 15 hours.
Section Work, 2 hours weekly, 4 weeks..... 8 hours.

Surgery.

Lectures, 3 hours, 10 weeks..... 30 hours.
Clinics, 2 hours weekly, 9 weeks..... 18 hours.
Clinics, 1 hour weekly, 8 weeks..... 8 hours.
Clinics, 1 hour weekly..... 30 hours.
Clinics, 1 hour weekly, 18 weeks..... 18 hours.
Clinics, 1 hour weekly..... 30 hours.
Section Work, 1 hour weekly, 5 weeks..... 5 hours.
Section Work, 2 hours weekly, 5 weeks..... 10 hours.
Section Work, 2 hours weekly, 5 weeks..... 10 hours.
Operative Surgery, 6 hours weekly, 10 weeks..... 60 hours.
Recitations, 1 hour weekly..... 30 hours.

Therapeutics.

Lectures, 1 hour weekly	30 hours.
Clinics, 1 hour weekly	30 hours.
Recitations, 1 hour weekly	30 hours.
Section Work, 1 hour weekly, 5 weeks	5 hours.

Obstetrics.

Lectures, 1 hour weekly, 25 weeks	25 hours.
Clinics, 1 hour weekly	30 hours.

Gynæcology.

Lectures, 1 hour weekly, 6 weeks	6 hours.
Clinics, 1 hour weekly	30 hours.
Section Work, 2 hours weekly, 5 weeks	10 hours.
Recitations, 1 hour weekly	30 hours.

Pathology.

Recitations, 1 hour weekly	30 hours.

Gross Pathology.

Laboratory, 6 hours weekly, 5 weeks	30 hours.

Diseases of Children.

Clinics, 1 hour weekly	30 hours.
Section Work, 2 hours weekly, 5 weeks	10 hours.

Genito-Urinary Surgery.

Lectures	6 hours.
Clinics, 1 hour weekly, 18 weeks	18 hours.
Section Work, 2 hours weekly, 5 weeks	10 hours.

Neurology.

Clinics, 1 hour weekly, 20 weeks	20 hours.
Section Work, 1 hour weekly, 5 weeks	5 hours.

Mental Diseases.

Lectures	5 hours.
Clinics	10 hours.

Dermatology.

Section Work, 5 hours weekly, 5 weeks	25 hours.

Laryngology and Rhinology.

Lectures, 1 hour weekly, 18 weeks..... 18 hours.
Section Work, 3 hours weekly, 5 weeks..... 15 hours.

Ophthalmology.

Clinics, 1 hour weekly, 10 weeks..... 10 hours.
Section Work, 4 hours weekly, 5 weeks..... 20 hours.

Otology.

Clinics, 1 hour weekly, 8 weeks..... 8 hours.
Section Work, 3 hours weekly, 5 weeks..... 15 hours.

Physiology of the Special Senses.

Lectures, 3 hours weekly, 2 weeks..... 6 hours.

Orthopædic Surgery.

Clinics, 1 hour weekly, 10 weeks..... 10 hours.
Section Work, 2 hours weekly, 5 weeks..... 10 hours.

Hygiene.

Lecture, 1 hour weekly, half the term..... 15 hours.

EXAMINATIONS.

REQUIREMENTS FOR ADVANCEMENT IN COURSE.

Students are advanced in course from one year to the next upon passing examinations in the work of that year, but examinations in major or minor subjects may, at the discretion of the Head of the Department, include all the work previously covered in the year or years preceding the examinations in question. There is, however, no unnecessary repetition of subjects taught from year to year. Students who have not succeeded in passing all their examinations will be allowed to enter upon the next year's studies, provided they pass examinations in the subjects failed in at the beginning of the session.

Examinations for advancement in course, graduation, and admission to advanced standing are held at the close of the year. In each laboratory course extending through a part of the year only, the examination is held at the close of the course.

Examinations for conditioned students and those desiring admission to advanced standing, who have not taken the spring examinations, are held during the first fortnight of the fall term.

The subjects examined upon are divided into major and minor subjects, and a standing of 75 per cent. is required to pass.

The minor subjects embrace laboratory courses and those in which instruction is given by recitations only.

Subjects of Examination for Admission to the Second Year.

Major Subjects..Anatomy (except the nervous system, viscera, and organs of special sense).
Physics.
Inorganic Chemistry.
Physiology (except the nervous system and organs of special sense).

Minor Subjects..Histology (except the nervous system and organs of special sense).
Laboratory Inorganic Chemistry.

Conditions allowed (at the spring examinations): 1 Major and 1 Minor; or 2 Minor.

NOTE 1. In each of the laboratory courses of the first and subsequent years, students whose marks fall below a certain percentage will be allowed one reëxamination within two weeks of the completion of the course, failing in which they must repeat the laboratory course with the next succeeding section.

Students whose marks fall below this percentage in the chemical laboratory cannot be reëxamined, but must repeat the course with the next succeeding section.

NOTE 2. In each of those branches in which recitations are held throughout the year, there shall be a written review conducted by the instructors and supervised by the professor in charge of the department, and also a final written review conducted by the professor himself at the close of the year. The written reviews conducted by the instructors shall be held as soon as possible after the return from the Christmas recess, and shall count as a single recitation, the object being to ascertain the knowledge acquired by the student.

NOTE 3. *All conditions must be successfully passed before entrance into the next succeeding year will be allowed.*

Subjects of Examination for Admission to the Third Year.

Major Subjects..Anatomy.
Organic Chemistry.
Physiology.

Minor Subjects..Medicine.
Surgery.
Obstetrics.
Bacteriology.
Normal Histology (central nervous system and organs of special sense).
Pharmacology.
Laboratory Organic Chemistry.

Conditions allowed: 1 Major and 1 Minor; or 2 Minor subjects.

(See Notes 1, 2 and 3 above.)

Subjects of Examination for Admission to the Fourth Year.

Major Subjects..Materia Medica.
Toxicology.
Pathology.

Minor Subjects..Obstetrics and Gynæcology.
Medicine.
Surgery.
Clinical Pathology.
Pediatrics. } Clinical Paper.
Neurology. }
Gross Pathology.

Conditions allowed: 1 Major and 1 Minor; or 2 Minor.

See Notes 1, 2 and 3, page 88.)

Subjects of Examination for Graduation at the End of the Fourth Year.

Medicine.
Surgery.
Obstetrics and Gynæcology.
Therapeutics.

Special Subjects:
- Hygiene. } Clinical Paper.
- Ophthalmology. } Clinical Paper.
- Neurology. } Clinical Paper.
- Laryngology and Rhinology.
- Orthopædics. } Clinical Paper.
- Pediatrics. } Clinical Paper.
- Pathology (General). } Clinical Paper.
- Mental Diseases.
- Otology. } Clinical Paper.
- Dermatology. } Clinical Paper.
- Genito-Urinary Diseases. } Clinical Paper.

Students conditioned in only one subject at the end of the fourth year will be given an opportunity to make up the con-

dition within two weeks. If the second examination is satisfactory the degree may be conferred at the Commencement at Ithaca.

Those conditioned in more than one subject or who fail to pass in the second examination just mentioned must repeat the work of the fourth year.

REQUIREMENTS FOR GRADUATION.

1. Candidates for the degree of doctor of medicine must have studied medicine for four full years in an accredited medical college, and the fourth year at least must have been spent in the Cornell University Medical College.

2. Candidates must present satisfactory evidence of good moral character and of being not less than twenty-one years of age.

3. Candidates must file with the Secretary of the Faculty the Cornell Regents' medical-student certificate as evidence of having complied with the requirements for admission.

4. Candidates must have dissected at least seven parts in anatomy (see page 45). They must, further, have taken the regular course of two weeks in practical obstetrics.

5. In addition to the yearly examinations above specified for advancement in course, candidates must pass at the end of the fourth year examinations in medicine, surgery, therapeutics, obstetrics, and gynæcology, and the special branches as are specified on page 89.

6. Candidates rejected at the final examination will not be reexamined until after having repeated their fourth year of study. Before being readmitted to the fourth year the candidate must pass a satisfactory examination in anatomy, physiology, chemistry and physics, and materia medica.

7. The degree will not be conferred upon any candidate who absents himself from the public Commencement without the special permission of the Faculty.

8. The Faculty reserves the right to terminate the connection of any student with the institution *at any time* on the ground of what they may deem moral or mental unfitness for the profession, or improper conduct while connected with the College.

FINAL EXAMINATION IN THE SUBJECTS OF THE FIRST AND SECOND YEARS.

A law passed at the last session of the legislature permits students to take part of their examinations for the license to practise medicine in this State at the end of the second year.

For the full text of the law see page 33, this catalogue.

REQUIREMENTS FOR LICENSE TO PRACTICE MEDICINE IN THE STATE OF NEW YORK.

All requirements for admission should be filed at least one week before examination.—They are as follows:

1. Evidence that applicant is more than twenty-one years of age (Form 1).

2. Certificate of moral character from not less than two physicians in good standing (Form 1).

3. Evidence that applicant has the general education required preliminary to receiving the degree of bachelor or doctor of medicine in this State (medical-student certificate. See examination handbook).

4. Evidence that applicant has studied medicine not less than four full school years of at least nine months each, in four different calendar years, in a medical school registered as maintaining at the time a satisfactory standard. New York medical schools and New York medical students shall not be discriminated against by the registration of any medical school out of the State, whose minimum graduation standard is less than that fixed by statute for New York medical schools.

First exemption: "The Regents may in their discretion accept as the equivalent for any part of the third and fourth requirement, evidence of five or more years' practice of medicine, provided that such substitution be specified in the license."

5. Evidence that applicant "has received the degree of bachelor or doctor of medicine from some registered medical school, or a diploma or license conferring full right to practise

medicine in some foreign country" (Form 2 or original credentials).

6. The candidate must pass examinations in anatomy, physiology and hygiene, chemistry, surgery, obstetrics, pathology and diagnosis, therapeutics, practice, and materia medica. The questions "shall be the same for all candidates, except that in therapeutics, practice, and materia medica all the questions submitted to any candidate shall be chosen from those prepared by the board selected by that candidate, and shall be in harmony with the tenets of that school as determined by its State Board of Medical Examiners."

Second exemption: "Applicants examined and licensed by other State examining boards registered by the Regents as maintaining standards not lower than those provided by this article, and applicants who matriculated in a New York State medical school before June 5, 1890, and who received the degree of M.D. from a registered medical school before August 1, 1895, may, without further examination, on payment of $10 to the Regents, and on submitting such evidence as they may require, receive from them an indorsement of their licenses or diplomas, conferring all rights and privileges of a Regents' license issued after examination."

7. A fee of $25 payable in advance.

Diplomas of Licentiate of the Royal College of Physicians of London and Membership of the Royal College of Surgeons of England.

Graduates of the Cornell University Medical College are admitted to the final examination for the diploma of Licentiate of the Royal College of Physicians of London and Membership of the Royal College of Surgeons of England, upon presenting proper certificates that certain conditions applicable to the foreign universities and colleges which are recognized by the examining board have been complied with.

Further information may be obtained from the Secretary of the Board (Mr. F. G. Hallett) at the Examination Hall, Victoria Embankment, London, W. C.

PRIZES.

The Harriet Crocker Alexander prizes, the first of $150, the second of $50, are awarded, the first to the student having the highest record, and the second to the student having the next highest record in the graduating class.

A friend of the college, whose name is withheld by request, has entrusted to the Dean enough money to increase this second prize to $100, and to add a third prize of $50.

HOSPITAL APPOINTMENTS.

The students and graduates of the Cornell University Medical College are entitled to compete on equal terms with those of other colleges for positions on the resident staff of Bellevue and the other hospitals of the city.

Some of these hospitals are: The City, Harlem, Gouverneur, New York, St. Luke's, Presbyterian, St. Vincent's, St. Francis', Mount Sinai, German and Hudson Street hospitals, New York Eye and Ear Infirmary, and the hospitals in Brooklyn and Jersey City, Newark, Paterson, etc.

The requirements, the times of examination, and the period of service differ. The details can be learned by application, written or in person, to the superintendents or to the secretaries of the medical boards of the various hospitals.

SUMMER SCHOOL.

The Medical Department will continue during the summer of 1903 the Summer School which has proved of so much advantage.

The courses are designed primarily for advanced students or for workers in specialized lines of research or for post graduates. They are scheduled to begin early in May, and to continue about six weeks in order to terminate before the hottest weather. These courses include different portions of the subjects of normal histology; clinical, gross, and histological pathology; bacteriology, chemistry, anatomy, and operative surgery.

A pamphlet giving full details can be obtained by application to the Secretary of the College.

SUGGESTION.

It would be to the advantage of students if they would register a few days in advance of the opening exercises, secure boarding-places, and purchase books, so that their studies may not be interrupted in the beginning. The Clerk is in his office every day after September 1, *from* 10 A.M. *to* 2 P.M.

TEXT-BOOKS.

As a rule, only the latest editions of text-books should be purchased.

Anatomy—Text-Book, Gerrish, second edition, $6.50; Reference Works, Morris, $6.00; Gray, $5.50; Quain, $25.20; Haynes, *Guide to Dissection,* $0.80; Woolsey, *Surgical Anatomy,* $5.00; Haynes, *Manual of Anatomy,* $2.50.

Bacteriology—Sternberg's *Manual of Bacteriology,* $4.50; Muir and Ritchie, *Manual of Bacteriology,* $3.25.

Chemistry—Witthaus, *Manual of Chemistry,* fifth edition, $3.25; Wolf, *Laboratory Handbook,* $1.25; Ganot's *Physics,* $5.00.

Dermatology—J. Nevins Hyde, $4.50; H. Radcliffe Crocker, third edition, $5.00.

Diseases of Children—Williams, *Medical Diseases of Infancy and Childhood,* $3.50; Starr, *An American Text-book of the Diseases of Children,* $7.00.

Genito-Urinary—White and Martin, $6.00; Hyde and Montgomery, $4.00; Keyes and Chetwood, $2.75.

Gynæcology—Penrose, $3.75; Dudley, $5.00; Kelly, $15.00.

Histology—Stohr, *Text-Book of Histology* $3.00; Bohm, Davidoff, and Huber, *Text-Book of Histology,* $3.50.

Hygiene—Egbert, *Hygiene and Sanitation,* $2.25; Notter, *Theory and Practice of Hygiene,* $7.00.

Laryngology and Rhinology—Knight, *Diseases of the Nose and Throat;* Grünwald, *Atlas of Diseases of the Larynx;* Grünwald, *Atlas of Diseases of the Mouth, Pharynx and Nose.*

Materia Medica and Therapeutics—White and Wilcox, *Materia Medica and Therapeutics,* $3.00; Coleman, *Syllabus of Materia Medica,* $1.00; Hare, *Practical Therapeutics,* $4.00; Thompson, *Practical Dietetics,* $5.00; *American Text-Book of Applied Therapeutics.*

Medicine—Musser, *Medical Diagnosis,* $6.00; Thompson's *Practical Medicine,* $5.00; for reference, Loomis-Thompson, *American System of Practical Medicine,* $24.00.

Mental Diseases—Regis-Berkley, *Mental Diseases,* $5.00; Tuke's *Dictionary of Psychological Medicine,* $10.00; Hamilton and Godkin, *System of Legal Medicine,* $10.00.

Nervous Diseases—Dana, *Diseases of the Nervous System,* $3.50; Gower, *Diseases of the Brain and the Spinal Cord,* $8.00; Dercum, $6.00; Obersteiner, *Anatomy of the Nervous System,* $5.50.

Obstetrics—Edgar's *Practice of Obstetrics,* $6.00; Jewett's *System of Obstetrics,* $5.00.

Ophthalmology—Noyes, $5.00; De Schweinitz, $4.00; Swanzy, $2.50; Jackson, $2.50; Nettleship, $3.00.

Orthopœdic Surgery—Bradford and Lovett, $4.50.

Otology—Bacon on the Ear, $2.25; Politzer, *Diseases of the Ear,* $7.00; Macewen, *Pyrogenic Infective Diseases of the Brain and Spinal Cord,* $4.00.

Pathology—Delafield and Prudden, *Pathological Anatomy and Histology,* $5.00; Orth, *Pathological Diagnosis* (Trans. of Sydenham Society); Zeigler, *General Pathology,* $5.00.

Clinical Diagnosis—V. Jaksch, $6.50; Simon, $3.75; Ewing, *Pathology of the Blood,* $3.50.

Physiology—Kirke's *Hand-Book of Physiology,* seventeenth edition, Halliburton, 1901, $3.00; Flint, *Physiology of Man;* Stewart, $3.75; Foster, $3.60; Landois.

Surgery—Tillman, 3 vols., $15.00; *American Text-Book,* $7.00; Parks, *Surgery,* $6.00; Stimson, *Fractures and Dislocations,* $5.00; Stimson, *Operative Surgery,* $3.00; Dennis, *System of Surgery,* $6.00 per volume.

Gould, *Student's Medical Dictionary,* $2.50.

Dissecting Cases—$2.00 to $5.00.

Text-books, etc., may be obtained from the Clerk at the college.

FACULTY OF MEDICINE AT ITHACA.

BURT GREEN WILDER, B.S., M.D.,
Professor of Neurology, Vertebrate Zoölogy, and Physiology.

EDWARD LEAMINGTON NICHOLS, B.S., Ph.D.,
Professor of Physics.

SIMON HENRY GAGE, B.S.,
Professor of Histology and Embryology.

VERANUS ALVA MOORE, B.S., M.D.,
Professor of Comparative Pathology and Bacteriology.

LOUIS MUNROE DENNIS, Ph.B., B.S.,
Professor of Inorganic Chemistry.

WILLIAM RIDGELY ORNDORFF, A.B., Ph.D.,
Professor of Organic and Physiological Chemistry.

ERNEST GEORGE MERRITT, M.E.,
Professor of Physics.

GEORGE SYLVANUS MOLER, A.B., B.M.E.,
Assistant Professor of Physics.

BENJAMIN FREEMAN KINGSBURY, Ph.D., M.D.,
Assistant Professor of Physiology.

ABRAM TUCKER KERR, B.S., M.D.,
Assistant Professor of Anatomy.

EMILE MONNIN CHAMOT, B.S., Ph.D.,
Assistant Professor of Sanitary Chemistry and Toxicology.

PAUL RICHARD BROWN, M.D.,
Lecturer on Obstetrics and Medicine.

HOMER JAMES HOTCHKISS, A.M., M.M.E.,
Instructor in Physics.

JOHN SANDFORD SHEARER, B.S., Ph.D.,
Instructor in Physics.

BERT BRENETTE STROUD, D.Sc.,
Instructor in Physiology, Vertebrate Zoölogy, and Neurology.

THEODORE WHITTELSEY, A.B., Ph.D.,
Instructor in Chemistry.

HENRY ROSE JESSEL, B.S., Ph.D.,
Instructor in Chemistry.

SAMUEL HOWARD BURNETT, A.B., M.S.,
Instructor in Comparative Pathology and Bacteriology.

JOHN EDGAR TEEPLE, B.S.,
Instructor in Chemistry.

AUGUSTUS GROTE POHLMAN, M.D.,
Instructor in Anatomy.

BENSON A. COHOE, B.A., M.B.,
Instructor in Anatomy and Histology.

HUGH DANIEL REED, B.S.,
Instructor in Systematic and Economic Zoölogy.

WILLIAM CROOKS THRO, A.M.,
Instructor in Histology and Embryology.

MERVIN TUBMAN SUDLER, Ph.D., M.D.,
Instructor in Anatomy and Histology.

LAWRENCE HENDEE, A.B., M.D.,
Assistant Demonstrator of Anatomy.

GERSHOM FRANKLIN WHITE, B.S.,
Assistant in Bacteriology.

WILLIAM FREDERIC WISMAR, A.B.,
Assistant in Histology and Embryology.

JOSEPH HEYWOOD RUSSELL, A.B.,
Assistant in Chemistry.

JAY EMERY ROOT, A.B.,
Assistant in Chemistry.

LEE FRED HAWLEY,
Assistant in Chemistry.

WILLIAM CHAUNCEY GEER, A.B.,
Assistant in Chemistry.

WILLIAM ATWOOD HILTON, Ph.D.,
Assistant in Histology and Embryology.

BENJAMIN BERNARD TURNER, B.S., Ph.D.,
Assistant in Chemistry.

EARL BLOUGH, A.B.,
Assistant in Chemistry.

HAROLD ROLLIN WADE, A.B.,
Assistant in Chemistry.

JAMES MUNSIE BELL, B.A.,
Assistant in Chemistry.

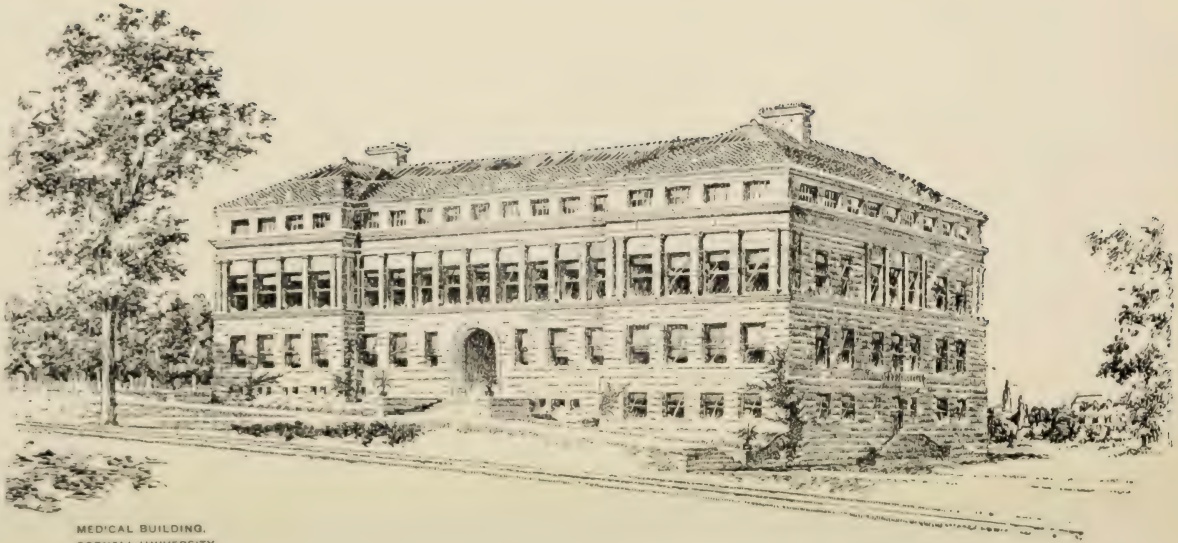
CASSIUS WAY, B.AGR.,
Assistant in Medical Bacteriology and Pathology.

WALTER EDWARDS KING, A.B.,
Assistant in Bacteriology.

WALTER SCHON LENK, B.S.,
Assistant in Chemistry.

HELEN ISHAM,
Assistant in Chemistry.

ABRAM T. KERR, B.S., M.D.,
Secretary of the Faculty at Ithaca.



MEDICAL BUILDING.
CORNELL UNIVERSITY.
W. H. MILLER. ARCHT.,
ITHACA, N. Y.

INSTRUCTION AT ITHACA.

During the First Two Years of the Course.

CALENDAR FOR ITHACA.

First Term, 1903-1904.

September 22d, Tuesday.—Academic year begins; matriculation of new students; University scholarship examinations begin.
September 23d, Wednesday.—Matriculation of new students.
September 24th, Thursday.—Registration of matriculated students.
September 25th, Friday.—Instruction begins in all departments of the University at Ithaca. President's annual address to students at 12 M.
December 23d, Wednesday.—Christmas recess begins.
January 5th, Tuesday.—Work resumed.
January 11th, Monday.—Founder's Day.
January 29th, Friday.—First term closes.

Second Term.

February 1st, Monday.—Registration for the second term.
April 1st, Friday.—Easter recess begins.
April 12th, Tuesday.—Work resumed.
June 16th, Thursday.—Instruction ends.
June 23d, Thursday.—Thirty-sixth annual commencement.

General Statement.

Upon the establishment of the Medical Department of Cornell University in 1898, in New York City, by action of the Board of Trustees, it was resolved that the work of the first two years, consisting as it does mainly of fundamental scientific subjects,

should also be given in Ithaca, where the opportunities offered by the long established departments of Botany, Zoölogy, Physics, Chemistry, Physiology, Histology, Embryology, and Bacteriology afford unusual advantages for thorough study. The remaining subjects of the first two years were also fully provided for.

Among the facilities of the University of special value to the Medical College may be mentioned the museums of Vertebrate and Invertebrate Zoölogy, including Entomology, Comparative Anatomy, of Agriculture, of Botany, and of Geology. The University Library, with its 250,000 bound volumes, 40,000 pamphlets, and 600 current periodicals and transactions, is likewise as freely open to medical students as to other University students.

Through the generosity of the late Dean Sage of Albany, the University has been enabled to erect a building especially designed for anatomy, histology, embryology, and physiology. The building is constructed of Ohio sandstone, similar to the library and law school. The general form is that of an E, 157 feet long and 50 feet wide, with wings 40 feet square.

In the cellar are situated the cold-storage, embalming, and cremating rooms, a large room 40 feet square for aquaria, projection, etc., and store rooms.

In the basement is a room for the ventilating and cold-storage machinery, a recitation room, a large lecture room, and the office of the departments of surgery, medicine and obstetrics, besides the lower part of the large amphitheatre.

On the first floor are located the cloak rooms for men and women, college office, library, faculty room, office and private laboratory of the Professor of Histology, two recitation rooms, upper part of the large amphitheatre, and assembly room.

The second floor is devoted to the departments of histology and physiology, each with a large general laboratory, a research laboratory, preparation rooms, and private laboratories for the staff of instruction.

The third floor consists of the general and special dissecting rooms, study rooms, and amphitheatre, besides rooms for the staff.

The attic is utilized for photography, macerating the skeletons, and for storage.

The greatest pains have been taken for ventilation. The lighting, as shown by the picture between pages 96 and 97, is almost perfect in all the rooms.

DEPARTMENTS, METHODS, AND FACILITIES.

ANATOMY.

Abram T. Kerr, B.S., M.D., *Assistant Professor.*
Augustus G. Pohlman, M.D., *Instructor.*
Mervin T. Sudler, Ph.D., M.D., *Instructor.*
Benson A. Cohoe, B.A., M.B., *Instructor.*
Lawrence Hendee, A.B., M.D., *Assistant Demonstrator.*

The anatomy is given in both the first and second years. The work consists of section demonstrations and dissection, special attention being given to practical work in the laboratory. All the laboratory work is concentrated in the first half year. By thus enabling the student to devote a large amount of time continuously to the work, it is believed the best results are obtained.

During the first year, first half, thirty-five hours per week are devoted to laboratory work. The class is divided into three groups; one assigned to the dissection of the head and neck, one to the upper extremity, and one to the lower extremity. These, starting simultaneously in September, study the bones of their parts before taking up the dissection. Upon the satisfactory completion of one part, the bones and dissection of another part are taken up in a similar way.

During the second year, first half, twenty-five hours per week are devoted to laboratory work. The student is expected to dissect the thoracic and abdominal viscera; assigned regions and special parts; upon completing these there will be an opportunity to repeat any of the required work, or to do original work. As the laboratory work in osteology and in dissection advances, the students are called from the laboratory in small groups for demonstrations upon the work which they have completed.

In the first year, a complete skeleton is loaned to each two students. During the two years, the student is required to make at least one complete dissection of the human body. The dissecting material is sufficient, thoroughly embalmed, and is kept in cold storage, so as to be ready for use when needed. The work is personal and practical, each student being independent of the others, so that those with special training or ability are in no way retarded by the slower members of the class. The object of the course is not only to teach the structure, connections, and relations of the parts of the body, but also to train the student in methods of scientific work, observation, and thought. The students are encouraged to make careful notes and drawings, and to record all variations from their text-book descriptions. For this purpose they are furnished with outline record charts.

In addition to the laboratory work, there will be, during the second half year, two demonstrations per week to small sections of the class, on Topographical and Regional Anatomy. In these, special dissections will be shown to the students, and their attention called to the practical application of Anatomy to Medicine and Surgery. The structure, connections, and relations of the thoracic and abdominal viscera will be demonstrated twice a week to small sections.

Those who have satisfactorily completed the required work, and others properly qualified, will be given opportunity to do advanced and original work.

HISTOLOGY AND EMBRYOLOGY.

Simon Henry Gage, B.S., *Professor.*
William Crooks Thro, A.M. *Instructor.*
Mervin Tubman Sudler, Ph.D., M.D., *Instructor.*
Benson Ambrose Cohoe, A.B., M.B., *Instructor.*
William Atwood Hilton, Ph.D., *Assistant.*
William Frederic Wismar, A.B., *Assistant.*

As indicated by the following courses, this department offers elementary and advanced instruction in the theory and use of the microscope and its accessories, in photo-micrography, in verte-

brate histology, and vertebrate embryology; and opportunities for research in all of these subjects.

The material equipment consists of a good supply of modern microscopes, camera lucidas, polariscopes, micro-spectroscopes, photo-micrographic cameras, and other special apparatus are in sufficient numbers to give each student opportunity for personally learning to use them, and for applying them to any special study in which they are called for. The general and research laboratories are large and are equipped with microtomes, incubators, aquaria, etc. The collection of histologic and embryologic specimens is extensive and constantly increasing. Sets of typical specimens are available for study and comparison by the students.

The aim of the department is to bring the student into direct contact with the truths of nature, and hence, while there are lectures to give broad and general views, there is a large amount of laboratory work in which the facts are learned at first hand, and the methods and manipulations necessary for acquiring the facts are practised by each student. It is recognized that less ground can be covered in a given time in this way, but it is believed, and experience has confirmed the belief, that the intellectual independence and power to acquire knowledge direct from nature which is gained by this personal work is of far higher value than the facts and theories that might be learned in the same time from books and lectures alone, or from specimens prepared by some other individual.

This lake region with its rich and varied fauna is especially favorable for investigations in the histology and embryology of all the main groups of vertebrates; and the proximity of the abattoirs in the city makes it possible to obtain material for the study of the development of the sheep, cow, and pig. The clinic and veterinary department supply material for the embryology of the cat and dog, so that the opportunities for research upon the development of the domestic animals are excellent. Every encouragement is given for the fullest utilization of these opportunities.

Microscopy.—The first two weeks of the course are given to a study of the theory and manipulation of the modern microscope and its accessories, the underlying principles involved in the preparation, mounting, and study of microscopic objects.

Histology.—This part of the course includes the study of the fine anatomy of man and of the domestic animals, and also the fundamental methods of histologic investigation and demonstration with the microscope.

Embryology.—This deals with the elements of the development of man and of the domestic animals. For ease of demonstrating segmentation, the formation of the germ layers and the organs, the amphibian egg is studied. Then follows a short study of the developing hen's egg to illustrate meroblastic segmentation and to make intelligible some of the phases of mammalian embryology. The main part of the course, however, is devoted to mammalian development. Gravid uteri are obtained from the abattoirs, and each student has the opportunity to dissect the placenta, fetal membranes, umbilical cord, and the fetus itself, demonstrating among other things the main features of the fetal circulation. For the microscopic study, the department is well supplied with complete series of embryos of the chick, pig, cat, calf, etc., and each student has for study four complete series representing the principal steps in histogenesis and the development of the organs.

PHYSIOLOGY AND NEUROLOGY.

Burt Green Wilder, B.S., M.D., *Professor.*
Bert Brenette Stroud, D.Sc., *Instructor.*
Hugh Daniel Reed, B.S., *Instructor.*

Of the three general courses given in this department, Physiology, Vertebrate Zoölogy, and Neurology, each covering about one-third of the first year, medical students take only the lectures of the first and third.

Physiology, Course 1.—Two lectures per week until the Christmas recess. The title of this course is employed in the absence of any single word fully indicating its scope. It really constitutes an introduction to the study of the structure, functions, and relationships of man and other vertebrates.

Since a large part of physiology is based upon experiments upon animals, there is given first an outline of the animal king-

dom, with special reference to the forms commonly used by physiologists. The anthropoid apes (gorilla, chimpanzee, orang, and gibbons) are considered somewhat fully on account of their numerous resemblances to man, *e.g.*, the arrangement of the cerebral fissures and the possession of the cecal appendix.

The study of function is begun with the biceps, the several uses of which are demonstrated upon apparatus and the living muscle. Special attention is paid to points not infrequently neglected, the combinations and counteractions of muscles and the economics of levers in the body. At least one lecture is devoted to each of the following topics:—Human locomotion, ciliary action, and the mechanics of circulation and respiration. About one-half of the course is given to the development, structure, and functions of the nervous system and sense organs. Among the experiments are the action of the phrenic nerve, the relations of the vagus to respiration and cardiac inhibition, the behavior of the decerebrized frog, and the demonstration of the motor areas of the cerebral cortex.

The means of illustrating this course include a full-sized manikin, a complete set of the Auzoux models, a "phantom brain," other models, and apparatus and charts.

Neurology, Course 3.—Two lectures per week after the Easter recess. There are considered (*a*) the various modifications of the vertebrate brain; (*b*) the structure and peculiarities of the human brain; (*c*) the human cerebral fissures as criteria of zoölogic or racial affinity, as indexes of physical or mental quality or power, and as boundaries of the cortical areas recognized by Flechsig and others. During this course is given a demonstration of the methods of removing and preparing the human brain for the elucidation of morphologic points. For the illustration of this course there are numerous diagrams representing actual preparations of the brains of man and other vertebrates. The neurologic division of the museum comprises about 1,500 preparations, distributed as follows, in round numbers: Human adults and children, 420; human embryo, fetal and at birth, 213; apes and monkeys, 282; other mammals, 400; other vertebrates, 185.

In both courses the members of the class have at all times free access to the lecture room, where are kept standard manuals, treatises, and monographs.

Opportunities for research are offered, especially in respect to the heart and the brain.,

HUMAN PHYSIOLOGY.

BENJAMIN FREEMAN KINGSBURY Ph.D., M.D., *Assistant Professor.*
.....*Instructor.*
.....*Instructor.*
.....*Assistant.*

The instruction in this department is carried on by means of lectures, recitations, and practical work in the laboratory.

The lectures are illustrated by numerous lantern slides; practical demonstrations form a component part of the exercises wherever possible, and the relationship of physiology to practical medicine is thoroughly emphasized.

In the laboratory a few exercises are devoted to the physiology of the digestive processes and of the blood; the remainder of the work being devoted to the physiology of the nervous, muscular, and circulatory systems. The equipment includes kymographs, sphygmographs, sphygmometers, cardiographs, tambours, centrifuges, microscopes, and other apparatus essential for complete and satisfactory work.

Students are required to take notes, and to hand in their reports accompanied with the tracings and other data obtained from their experiments for inspection and correction.

MATERIA MEDICA.

BENJAMIN FREEMAN KINGSBURY Ph.D., M.D., *Assistant Professor.*
.....*Instructor.*
.....*Instructor.*
.....*Assistant.*

In this department the work required of medical students consists of a laboratory course only, to serve as an introduction to

the lecture and clinical courses given in New York during the third and fourth years. The student is made familiar in this course with the physical and chemical properties of a selected number of drugs; incompatibilities are demonstrated, and the essentials of prescription-writing explained. A large assortment of crude drugs and many of their various preparations are available for examination.

The work in this course consists of the study of a selected group of inorganic drugs; the study of certain crude organic drugs and their official preparations; in making pharmaceutical preparations, such as syrups, emulsions, spirits, liniments, tinctures, fluid extracts, extracts, ointments, pills, and others. Some exercises will also be devoted to the study of the direct physiological action of a few selected drugs upon some of the lower animals.

In their study the students are required to write concise notes of the physiological action of the drugs examined and to make tests of their incompatibility. In addition to this each student will have practical experience in writing and compounding prescriptions. The importance of a discriminating and accurate system for dispensing medicines is thoroughly emphasized.

PHYSICS.

Edward Leamington Nichols, B.S., Ph.D., *Professor.*
Ernest George Merritt M.E., *Professor.*
George Sylvanus Moler, A.B., B.M.E., *Assistant Professor.*
Homer James Hotchkiss, A.M., M.M.E., *Instructor.*
John Sandford Shearer, B.S., Ph.D., *Instructor.*

The instruction in physics is by means of lectures throughout the year. In these lectures the general laws of mechanics and heat, electricity and magnetism, and sound and light are presented. The very large collection of lecture-room apparatus possessed by the department makes it possible to give experimental demonstrations of all important phenomena. The arrangements for experimental work are most complete. Ordinary illuminating gas, acetylene, oxygen and hydrogen, compressed

air, water and steam, blast and vacuum are within easy reach, and electric currents from alternating and direct current dynamos and from storage batteries are available. A masonry pier 4×12 feet permits the use in the lecture room of delicate apparatus that could otherwise be used only in the laboratory. A small turbine on the lecture table furnishes power for a variety of experiments. Lanterns with lime or electric light are always ready for use when they can in any way aid a demonstration.

The required course (7) in physics for medical students consists of two lectures a week throughout the first year, and the reading of a text-book. Note-books prepared by members of the class are read and graded at frequent intervals. A longer course (2*b*), consisting of two lectures a week, two recitations a week, and one afternoon in the laboratory, is likewise open to medical students, and all those who can find the time to do so, are urged to take this course in place of the required work mentioned above. It should be chosen in preference to the latter by all who wish to prepare themselves for advanced work in the biological sciences. The lectures in this course are supplemented by thorough drill upon the principles of the science, and this, together with the laboratory practice, affords opportunity for a much more adequate knowledge than can be obtained from any course that consists solely of lectures.

During the second term the department offers a course in practical photography (Physics, 9; 2 hours), consisting of lectures and laboratory practice. This course is open to students of medicine under the conditions stated upon page 152 of the University Register.

CHEMISTRY.

Louis Munroe Dennis, Ph.B., B.S.,
Professor of Inorganic Chemistry.

William Ridgely Orndorff, A.B., Ph.D.,
Professor of Organic and Physiological Chemistry.

Emile Monnin Chamot, B.S., Ph.D.,
Assistant Professor of Sanitary Chemistry and Toxicology.

Instructors in Chemistry,

THEODORE WHITTELSEY, A.B., Ph.D.
HENRY ROSE JESSEL B.S., Ph.D.
JOHN EDGAR TEEPLE, B.S.,

Assistants in Chemistry.

WILLIAM CHAUNCEY GEER, A.B.
BENJAMIN BERNARD TURNER, B.S., Ph.D.
JAY EMERY ROOT, A.B.
HAROLD ROLLIN WADE, A.B.
JAMES MUNSIE BELL, B.A.
LEE FRED HAWLEY.
EARL BLOUGH, A.B.
WALTER SCHON LENK, B.S.
HELEN ISHAM.
JOSEPH HEYWOOD RUSSELL, A.B.

Inorganic Chemistry.—The elements of Inorganic Chemistry are taught by lectures, laboratory work, and recitations. The lectures are profusely illustrated by experiments and lantern projection, and while presenting the fundamental concepts of chemical theory are also largely descriptive in character. Experiments illustrating the principles discussed in the text-book are performed in the laboratory by each student.

Qualitative Analysis.—The qualitative analysis begins with the study of such reactions of the commoner elements and their compounds as are used in their detection. This is followed by the practical application of the knowledge thus gained to the analysis of unknown substances, both in the solid form and in solution. The work is accompanied by thorough drill in the writing of chemical equations.

Organic Chemistry, or the Chemistry of the Compounds of Carbon.—In this course the study of the typical compounds of carbon, their properties, reactions, and relations to one another, is taken up, especial attention being given to those organic substances that are of physiological importance. The course consists of lectures and recitations, supplemented by frequent written

examinations. The lectures are fully illustrated by experiments, specimens of the compounds considered, and charts.

Toxicological Chemistry.—This course is intended to serve as an introduction to the methods employed for the separation and identification of the common poisons, inorganic and organic. Special attention is given to the identification of poisons when present in organic matter, such as animal excretions and tissues, medicines, etc. This course also includes the identity tests for a few synthetic remedies.

Physiological Chemistry.—The work in this course comprises the study of the chemistry of the proteids, carbohydrates, and fats, and of the compounds found in the animal body which are of physiological and pathological importance. The method of instruction is by lectures, recitations, and laboratory work, with frequent written reviews. In the laboratory the student separates from the various animal fluids and organs the chemical compounds which they contain, studies their properties, reactions, and products of decomposition, and thus familiarizes himself with the methods of isolation and identification of these products.

The above courses in Chemistry are required of all students in medicine. Other advanced courses are open to properly qualified students in medicine, and especial facilities for research work in chemistry are at their disposal.

BACTERIOLOGY.

Veranus Alva Moore, B.S., M.D., *Professor.*
Samuel Howard Burnett, A.B., M.S., *Instructor.*
Gershom Franklin White, B.S., *Assistant.*
Walter Edmonds King, B.A., *Assistant.*
Cassius Way, B.Agr., *Assistant.*

The instruction in Bacteriology is given by means of lectures, recitations, and laboratory work. The bacteriological laboratories are well supplied with the best modern apparatus. The student will, under proper supervision, prepare culture media, make cultures, and study the morphology of bacteria in both the fresh (living) condition and in stained cover-glass preparations.

In fact, all of the technique necessary for a practical working knowledge in bacteriology will be carefully covered. The more important species of pathogenic bacteria will be studied. The special methods which are necessary for diagnosing such diseases as tuberculosis, anthrax, glanders, and diphtheria will receive careful attention. Disinfection, sterilization, the means by which pathogenic bacteria are disseminated, protective inoculation, and other kindred subjects will be considered.

GENERAL PATHOLOGY.

VERANUS ALVA MOORE, B.S., M.D., *Professor.*
SAMUEL HOWARD BURNETT, A.B., M.S., *Instructor.*
GERSHOM FRANKLIN WHITE, B.S., *Assistant.*
WALTER EDMONDS KING, B.A., *Assistant.*
CASSIUS WAY, B.AGR., *Assistant.*

The course in pathology consists of lectures, recitations, and laboratory work in pathological histology. The student will also be given instruction in describing gross pathological specimens, but the major part of the work in the laboratory will consist in studying sections of diseased tissue and making drawings from the same. In this course it is expected that the student will become familiar with the terms used in morbid anatomy, together with a definite knowledge of the more important changes found in inflammation and the various forms of infiltrations and degenerations.

SURGERY.

.....M.D., *Lecturer on Surgery.*

Two hours weekly, throughout the year, lectures and recitations. The course is given to small sections, and is intended to familiarize the student with the principles of General Surgery and Pathology, and to ground him in the surgical diseases, tumors, and fractures, and the technique of operative asepsis and antisepsis, and of operations, dressings, and methods.

MEDICINE.

PAUL RICHARD BROWN, M.D., *Lecturer on Medicine.*

No didactic lectures are delivered, their place being taken by recitations from a standard text-book.

Recitations.—The study of medicine proper is begun with systematic recitations from Thompson's *Practice of Medicine.* In these recitations the nomenclature, etiology, pathology, and symptomatology of typical cases of diseases are considered, the question of treatment not being taken up until the Junior year in New York.

OBSTETRICS.

PAUL RICHARD BROWN M.D., *Lecturer on Obstetrics.*

Instruction in obstetrics consists mainly of recitations from a standard text-book, these recitations covering the anatomy of the internal genitalia and pelvis, ovulation, menstruation, signs of pregnancy, the physiology, mechanism, and clinical course of normal labor, and the care of mother and child during the puerperium. Whenever necessary, these recitations will be illustrated by plates, casts, and demonstrations upon the obstetric manikin, etc.

SCHEDULE AND SUMMARIZED STATEMENT.

In this schedule the Counts or University hours are given on the following basis: One recitation or lecture weekly for one term or half-year gives a credit of one; for laboratory work it requires two and one-half actual hours weekly for a term or half a year to secure a credit of one. In the courses of instruction following the schedule, the actual time required each week of the student at lectures, recitations, and laboratory work is stated.

Schedule.

First Year.

FIRST TERM.

Subject.	*No. of Course.*	*Hours of Credit.*	*Actual Hours per Week.*
Anatomy	1	13	32½
Physiology	1	1⅓	2
Physics	7	2	2
Chemistry	1	6	9

SECOND TERM.

Histology	1	8	16
Neurology	3	1⅓	2
Physiology Lectures	1	3	3
Physiology Recitations	2	3	3
Physics	7	2	2
Qual. Chem. Anal.	8	2	6
Toxicology	68	1	

Second Year.

FIRST TERM.

Subject.	*No. of Course.*	*Hours of Credit.*	*Actual Hours per Week.*
Anatomy	2	10	25
Organic Chemistry	32	3	3
Surgery	10	2	2
Pathology	40	4	8
Materia Medica	6	2	5
Obstetrics	11	2	2

SECOND TERM.

Anatomy	3	1	2
"	4	1	2
Physiology Lectures . . .	3	1	1
Physiology Recitations . . .	4	2	2
Physiology Laboratory . . .	5	2	5
Physiological Chemistry . . .	40	2	2
" " . . .	41	4	10
Bacteriology	43	6	12
Medicine	9	2	2
Surgery	10	2	2

Junior Year.—For subjects, see pages 82 to 84, as given in New York City.

Senior Year.—For subjects, see pages 84 to 86, as given in New York City.

SUMMARY OF COURSES OF INSTRUCTION.

First Year.

1. **Anatomy.**—Laboratory work with section practicums and recitations, thirty-two and a half actual hours weekly from September to February. The whole of Course I is required of first-year students in Medicine; for students in Arts the course may be divided. Assistant Professor Kerr, Instructors Pohlman, Sudler, Cohoe, Abbott, and Assistant Demonstrator Hendee.

1. **Microscopy, Histology, and Embryology.**—Two lectures, two recitations, and twelve hours of laboratory work weekly for the second half-year. Professor Gage and Instructors Thro, Sudler, Cohoe, Assistants Hilton and Wismar.

(The work in Microscopy begins February 1, and continues till February 13; the Histology begins February 15, and continues till April 24; the Embryology begins April 26, and continues till June 4.)

1. **Physiology.**—Two lectures weekly until the Christmas recess. Professor Wilder.

3. **Neurology.**—Two lectures weekly after Easter recess. Professor Wilder.

1. **Human Physiology.**—Three lectures each week, second half-year. Assistant Professor Kingsbury.

2. **Recitations in Human Physiology.**—Three hours each week. Second half-year. Instructors —— and ——

7. **Experimental Physics.**—Two lectures, with demonstrations, weekly throughout the year. Dr. Shearer.

3. **Introductory Inorganic Chemistry.**—Three lectures, one recitation, and five hours of laboratory work weekly. First half-year. Professor Dennis and Dr. Jessel: Messrs. Turner, Root, Wade and Bell.

8. **Qualitative Analysis.**—One lecture and five hours of laboratory weekly. Second half-year till Easter. Dr. Whittelsey; Mr. Greer.

68. **Toxicology.**—One lecture and five hours laboratory work weekly. Second half-year after Easter. Assistant Professor Chamot and assistant.

Second Year.

2. **Anatomy.**—Laboratory work with section practicums and recitations twenty-five actual hours weekly. September to February. Assistant Professor Kerr, Instructors Pohlman, Sudler, Cohoe, Abbott, Assistant Demonstrator Hendee. The whole of Course 2 is required of second-year students in Medicine; for students in Arts the course may be divided.

3. **Topographical and Regional Anatomy.**—Section demonstra-

tions two and a half hours weekly. February to June. Dr. Pohlman. (Open to those students in Arts who have had Course 1.)

4. Thoracic and Abdominal Viscera.—Section demonstrations two and a half hours weekly. February to June. Dr. Kerr.

6. Advanced and Research Work.—Laboratory work, elective. Eight or more actual hours per week. Dr. Kerr and Instructors.

4 and 5. Advanced and Research Work in Microscopy, Histology, and Embryology.—Laboratory work, elective. Eight or more hours per week, with seminary. Professor Gage.

3. Human Physiology.—The Functions of the Muscular and Nervous Systems and the Sense Organs. Three lectures each week. April 15 to June. Assistant Professor Kingsbury.

4. Recitations in Human Physiology.—Two hours each week. Second half-year. Instructors, —— and ——.

5. Physiological Laboratory.—Five hours each week. Second half-year. Assistant Professor Kingsbury and Instructors, ——.

24. Research and Advanced Work in Physiology and in Comparative Physiology.—(See University Register.)

32. Elementary Organic Chemistry.—Two lectures and one recitation weekly. First half-year. Professor Orndorff, Instructor Teeple, and Assistant Russell.

40. Physiological Chemistry.—Two lectures or recitations weekly. Second half-year. Professor Orndorff, Instructor Teeple, and Assistant Russell.

41. Physiological Chemistry.—Ten hours laboratory work weekly. Second half-year. Professor Orndorff, Instructor Teeple, and Assistant Russell.

Special facilities are provided by the Chemical Department for *advanced and research* work in chemistry. For a description of these courses see the Unviersity Register, page 154.

6. Materia Medica and Pharmacy, Laboratory.—Five hours each week. First half-year. Assistant Professor Kingsbury and Instructors, ——.

28. Advanced and Research Work in Materia Medica and in Comparative Materia Medica.—(See University Register.)

40. Pathology.—Two lectures or recitations and six hours laboratory work each week. First half-year. Professor Moore, Instructor Burnett and Mr. ——. This course is open to students who have had or are taking Course 1 in Microscopy.

43. Bacteriology.—Two lectures and ten hours laboratory work each week. Second half-year. Professor Moore; Assistants White and King.

44. Research in Bacteriology.—Laboratory work with lectures and seminary throughout the year. Professor Moore and Mr. White. The course is designed for those wishing to undertake original investigation in Bacteriology preparatory to practical work in bacteriological lines, such as exists in health department laboratories. This course is open to students who have taken Course 43 or its equivalent in some other university. Elementary chemistry and a reading knowledge of French and German are indispensable for successful work in this course.

45. Research in Pathology.—Laboratory work throughout the year. Professor Moore and Instructor Burnett. This course is open to students who have taken Course 40 and have taken or are taking Course 43, or the equivalent in some other university.

9. Medicine.—Two recitations weekly. Second half-year. Dr. ——.

10. Surgery.—One lecture and one recitation weekly throughout the year. Dr. ——.

11. Obsterics.—Two recitations weekly. First half-year. Dr. ——.

THE A.B. AND M.D. DEGREES.

As a liberal education in the arts and sciences is of great advantage to prospective students of medicine, all who can are urged to take the freshman, sophomore, and junior years in the Academic Department at Ithaca. After the completion of these years in the Academic Department (in which all the work is elective), the student is permitted to elect, as the fourth year of his A.B. course, a year's work in the Medical Department at Ithaca. He may then take his fifth year of work—the second of the medical course—either in Ithaca or in New York, but he must take the last two years of the medical course in New York. In this way he will obtain the A.B. degree at the end of four years, and the M.D. at the end of seven years of study. This is possible, because the first two years of the medical course in New York are offered in duplicate at the University in Ithaca.

Students who have taken the A.B. degree, as above, will, if they have anticipated in the Academic Department scientific studies prescribed in the medical course, be admitted to advanced standing in the Medical College in New York (see p. 25).

REQUIREMENTS FOR ADMISSION.

For admission to the Ithaca division of the Cornell University Medical College, a medical-student certificate issued by the Regents is required. (For details, see pages 23-33.) No student is admitted except at the beginning of the college year in September.

RESIDENCE AND REGISTRATION.

The college year is nine months long, extending from the last of September till about the middle of June, and is divided into two nearly equal terms. (For exact dates, see calendar on page 99.)

Residence in Ithaca is required of all students. For leave of absence during the session, application should be made to the Secretary, Dr. Kerr.

At the beginning of the term (September 22-24, 1903, and February 1, 1904) students must register with the University Registrar, Room 9A, Morrill Hall. After registration with the University Registrar, they must register with the Secretary of the Medical Faculty, Dr. Kerr, in Stimson Hall.

SCHOLARSHIPS. (See pages 35-36.)

EXAMINATIONS.

Students are advanced in course from one year to the next upon passing examinations upon the work of that year. As in the academic department, the work of each year is considered final of itself. There is no unnecessary repetition of subjects taught from year to year. According to the usage of the other departments, the university student found to be markedly deficient will be dropped from the college.

ADVANCEMENT FROM SECOND TO THIRD YEAR.

Upon the completion of the two years in Ithaca, the student must obtain from the Faculty a statement of all the work which he has done; and accompanying this statement must be a recommendation that he be allowed to register in the New York division. As a student is not advanced from one year to another in the New York division until all the work of the year is completed, a student from Ithaca cannot enter the third-year class in New York until the entire schedule of the first two years has been successfully completed. For removing any conditions, examinations are held at the beginning of the fall term, both in Ithaca and in New York City. The student is at liberty to take these examinations in Ithaca or in New York City. The examination on a subject in either place is final for that year. That is, the student will not be permitted to try an examination on a subject in Ithaca, and take advantage of the later date for the examination in New York to have a second examination on the same subject in the same autumn.

If a student is deficient in two or more subjects there is no objection to his taking the examination in one or more subjects in Ithaca, and the remaining ones in New York, the same autumn.

MEDICAL SOCIETY.

The Cornell Medical Society is a student organization. Meetings are held on Wednesday evenings of alternate weeks. At these, papers prepared by the members are read, followed by general discussion. The aim is to give mutual aid in gaining general and special medical knowledge, facility in conducting the exercises of the meetings, and in presenting papers and discussions in a clear and forcible manner before an audience.

TUITION AND LABORATORY FEES.

Tuition each year $150
Laboratory Fees to cover cost of material.

BOARD AND ROOMS.

The cost of living in Ithaca, including board, room, fuel, and lights, varies from $4 to $10 per week. By the formation of clubs, students are sometimes able to reduce their expenses to $3.50 per week for room and board, and occasionally to even less than that amount.

The cost for board, rent of furnished room, fuel and lights, in Sage College and Sage College Cottage, which are exclusively for women, varies from $5 to $6.50 a week. A student occupying alone one of the best rooms pays $6.50 a week. If two occupy such a room together, the price is $5.75. Those occupying less desirable rooms, with two in a room, pay $5 a week each. Both buildings are warmed by steam, lighted by electricity, and, in most cases, the sleeping apartment is separated from the study.

Letters of inquiry in regard to board and rooms at the Sage College and the Cottage should be addressed to Mr. G. F. Foote, Business Manager of Sage College, Ithaca, N. Y.

MATRICULANTS IN NEW YORK.

Albones, Arthur William.....Frankfort, N. Y.
Aranow, Harry.....New York City.
Armstrong, Arthur Soper, A.B.....Rome, N. Y.
Aronson, Harry.....Brooklyn, N. Y.
Atwater Ralph Willis.....Atwater, N. Y.
Bailey, Harold Capron.....Buffalo, N. Y.
Baird, Alvin Walter, A.B.....Portland, Ore.
Baldwin, Wesley Manning.....Brooklyn, N. Y.
Banker, Ernest Ensign.....Fort Edward, N. Y.
Banks, Percy Edward.....Cahoonzie, N. Y.
Barsky, Michael Halpern.....New York City.
Beckary, Albert, Ph.G.....New York City.
Becker, Henry Clinton.....Clinton, Mass.
Benedict, Albert Newell.....Yonkers, N. Y.
Berliner, Leopold Henry.....New York City.
Bernfeld, Samuel Joachim.....New York City.
Bishop, Ernest Simons, B.A.....Providence, R. I.
Bliss, Theodore, A.B.....Green Island, N. Y.
Block, Siegfried.....Brooklyn, N. Y.
Boettiger, Carl.....L. I. City, N. Y.
Bozenhardt, William Frederick.....New York City.
Branner, Maxwell.....New York City.
Broder, Charles.....New York City.
Brodie, Ralph Earle.....Bergen, N. Y.
Brown, Aaron.....New York City.
Brown, David Morris.....New York City.
Bugbee, Alice Gates, A.B.....New York City.
Bullard, Marguerite Jane, A.B.....Providence, R. I.
Bunin, Noah.....New York City.
Bunyan, John Crerar.....Saratoga, N. Y.
Burns, Geoffrey Charles Henry.....City Island, N. Y.
Carr, Hugh Holmes.....New York City.
Carter, Helen Louise.....Newark, N. J.
Ceasar, Abraham Louis.....New York City.
Chapin, Charles Willard.....Georgetown, N. Y.
Cohen, Rose, M.E., B.E.....New York City.
Coryell, Clarence Catlin.....Ithaca, N. Y.
Cottis, George Wilbert.....Rochester, N. Y.
Coyle, James Francis.....New York City.
Cudmore, John Homer.....New York City.

Cunniffe, Edward Rutherford.....Port Jervis, N. Y.
Dannreuther, Walter Taylor.....New York City.
Darbois, Edmund Otto.....W. Hoboken, N. J.
Davidson, Louis Leopold.....Newark, N. J.
Davis, Thomas George.....New York City.
Demarest, Ruth.....Nyack, N. Y.
de Pasquale, James.....Williamsbridge, N. Y.
de Varona, Joseph Leo.....New York City.
Di Rocco, Joseph.....New York City.
Dolan, Paul, A.B.....Brooklyn, N. Y.
Dosh, Louis Philippe.....Milford, Ia.
Dudley, Gerry Brown, A.B.....Ashmore, Ill.
Eliasberg, Bernard.....New York City.
Engel, Irving Harold.....New York City.
Eno, Harry.....Belgium, N. Y.
Epstein, Sigmund.....New York City.
Evans, Willis J.....New York City.
Farrell, Benjamin Peater.....Pittsfield, Mass.
Faust, John Wesley, B.S.....Poughkeepsie, N. Y.
Feldman, Isidor.....New York City.
Feldman, Samuel.....New York City.
Ferry, Perry Lawson.....Preble, Ind.
Finch, Sarah Elizabeth.....Brooklyn, N. Y.
Fincke, Harry Starke, Ph.G.....L. I. City, N. Y.
Fine, Abraham.....New York City.
Finkelstein, Morris Robert, A.B.....New York City.
Fischbein, Elias.....New York City.
Fish, Emmet Grant.....Mecklenburg, N. Y.
Fisher, Archie Max.....Spencer, N. Y.
Fitzgerald, Thomas Edmund.....Cortland, N. Y.
Fowler, Royale Hamilton.....Brooklyn, N. Y.
Fox, J. Francke, M.D.....Bluefield, W. Va.
Frank, Philip.....New York City.
Freedman, Louis.....New York City.
Freidenrich, Oscar W., M.D.....New York City.
Freitag, John Daniel, Jr.....Brooklyn, N. Y.
Friedman, Edward Louis.....Brooklyn, N. Y.
Frink, Horace Westlake.....Hillsdale, N. Y.
Fuchs, Jacob Nathan.....New York City.
Funai, Francis Victor.....New York City.
Gannon, John Francis, A.B.....Providence, R. I.
Garbat, Abraham Leon.....New York City.
Gettinger, Joseph Herman.....New York City.
Gifford, Herbert Clyde.....Oriskany, N. Y.
Ginsberg, Charles.....New York City.
Goldberg, Isaac.....New York City.
Goldberg, Jacob Martin.....Brooklyn, N. Y.
Golding, Harry Newport.....Paterson, N. J.
Golstein, David.....Brooklyn, N. Y.

Golstein, Isidor.....New York City.
Gordon, Charles Albert.....Brooklyn, N. Y.
Gould, Clark Sumner.....Walton, N. Y.
Grant, Joseph Roa.....Groton, N. Y.
Green, Arthur Randolph.....New York City.
Greenfield, Samuel.....New York City.
Grossman, William, A.B.....New York City.
Gurtov, Jacob.....New York City.
Hall, John Mead.....Norwich, N. Y.
Halpin, Leo Aloysius.....New York City.
Hanley, John Patrick.....Stafford Springs, Conn.
Hansen, Anthony Hans, A.B.....Norwich, N. Y.
Harris, George Francis.....Binghamton, N. Y.
Heim, John Alfred.....New York City.
Herrick, John Rutherford, B.A.....Peekskill, N. Y.
Hertz, Julius Jacob.....New York City.
Heuser, Gerhard William.....Brooklyn, N. Y.
Hilkowich, Abe Maurice.....New York City.
Hills, Rollin.....Governor's Island, N. Y.
Hinz, William.....New York City.
Hoerle, Horace Poinier.....Ridgewood, N. J.
Hollander, Samuel.....New York City.
Horowitz, Alfred Joseph.....New York City.
Horstman, August George.....Brooklyn, N. Y.
Horwitt, Samuel.....New York City.
Hubbard, Robert Youngs.....Jefferson, N. Y.
Hubbell, Hiram Gaylord.....Stamford, N. Y.
Huff, Barton.....Sterling, Ill.
Huntoon, Frank McElroy.....Newark, N. Y.
Hutcheson, Louise, A.B.....Washington, D. C.
Hyman, Charles.....New York City.
Hyman, Samuel Max.....New York City.
Isaacs, Harry Ezekiel.....W. Hoboken, N. J.
Jachnowitz, Morris Arthur.....New York City.
Jensen, Vesty Martin Petraeus Dyrlund, Ph.B.....Brooklyn, N. Y.
Joachim, Henry.....Brooklyn, N. Y.
Johnson, Dwight Fenn.....Wolcott, N. Y.
Josephson, Joseph.....New York City.
Judd, Harold Booth.....Bethel, Conn.
Kaufmann, Marcel.....W. New Brighton, N. Y.
Kearns, Thomas Joseph, B.A.....Brooklyn, N. Y.
Kemp, Maurice.....Catauqua, Pa.
Kennedy, George De Hart.....Buffalo, N. Y.
Kerr, William Murray.....New York City.
Kieb, Raymond Francis Charles, A.B.....Lowville, N. Y.
Kissel, Jacob.....Brooklyn, N. Y.
Klausner, Alexander.....New York City.
Klein, Morris James.....New York City.
Kommel, Louis Moses.....New York City.

Krupitzky, Jacob Louis.....Brooklyn, N. Y.
Lawrance, Elliot Wagstaff.....Rochester, N. Y.
Lazarus, David.....New York City.
Levin, Samuel.....New York City.
Levy, Abraham Aaron.....New York City.
Licht, Louis Frederick, Ph.G.....Brooklyn, N. Y.
Lintz, William.....New York City.
Lippman, Thomas Charles, Ph.G.....Sag Harbor, N. Y.
London, Julius.....New York City.
Ludwig, Robert Francis, A.B.....Springfield, Mass.
McCarthy, John William, A.B.....Holyoke, Mass.
McGlade, John Joseph.....New York City.
MacGregor, Herbert Paterson.....New York City.
Mackenzie, David Wallace, B.A.....Prince Edward Island, Can.
McLaren, Walter Austin.....Brooklyn, N. Y.
MacLeod, Murdoch Douglas.....Prince Edward Island, Can.
McMenamin, Francis Joseph.....Bath, N. Y.
McMurtrie, William Anderson, Ph.B.....Belvidere, N. J.
McNevins, John Alphonsus.....New York City.
Machlin, Morris.....New York City.
Magid, Maurice Oliver.....New York City.
Magill, William Henry, Ph.B.....Providence, R. I.
Mallon, Richard Sandford.....Paterson, N. J.
Mark, Charles Jacob.....New York City.
Markwitz, Abraham.....Brooklyn, N. Y.
Maxson, Cullen B.....Jersey City, N. J.
Maybaum, Jacob.....New York City.
Milbank, Samuel.....New York City.
Miltimore, Edward.....Catskill, N. Y.
Minard, Edwy Le Roy.....Boonton, N. J.
Minott, Enos Samuel Forrester.....New York City.
Mitchell, William Hobart.....New York City.
Mohan, John Francis.....Alleghany, Pa.
Morgenstern, Adolph.....New York City.
Moskowitz, Abraham.....Brooklyn, N. Y.
Moskowitz, Samuel.....New York City.
Muller, Theodore.....New York City.
Nattrass, Robert Birnn.....Hoboken, N. J.
Nechamkin, Alexander.....Brooklyn, N. Y.
Neu, J. Jerome.....New York City.
Newton, George Albert.....St. James, L. I.
Nichols, Carroll Leja.....Brooklyn, N. Y.
Norton, Thomas Joseph, A.B.....Lee, Mass.
O'Day, Sylvester Francis, A.B.....Binghamton, N. Y.
Palmer, William Hailes.....Mechanicsville, N. Y.
Paltun, Samuel.....New York City.
Parmenter, Louie Allen.....Corinth, N. Y.
Pearson, Henry B. S.....Tuscaloosa, Ala.
Peck, Ellery Newell, A.B.....Ithaca, N. Y.

Pfeiffer, William.....Brooklyn, N. Y.
Placek, Louis Joseph.....New York City.
Plume, Clarence Apgar.....Caldwell, N. J.
Pollack, Charles Maurice.....Brooklyn, N. Y.
Precht, Edward.....New York City.
Quigley, James Knight.....Trumansburg, N. Y.
Ratnoff, Hyman Leon.....New York City.
Ratzan, Michael Napoleon.....New York City.
Reed, James Erwin, Jr.....Schenectady, N. Y.
Rein, Bernard.....Brooklyn, N. Y.
Rex, William Frederick, Ph.G.....Brooklyn, N. Y.
Ritter, Isidor.....New York City.
Robinson, Henry Ulysses.....New York City.
Robinson, John Alden.....Ithaca, N. Y.
Robinson, Martin.....New York City.
Rohdenburg, George Louis.....New York City.
Romansky, Benjamin.....New York City.
Rose, William Walter.....South Orange, N. J.
Rosenberg, Herman.....New York City.
Rosenberg, Samuel.....New York City.
Rosenbluth, Jacob.....New York City.
Rosenthal, Isidor, Ph.G.....New York City.
Rothkowitz, Joseph.....New York City.
Ruch, Valentine, Jr.....Englewood, N. J.
Russell, Irvine Justin.....East Nichols, N. Y.
Russianoff, Max Jacob.....New York City.
Samuelson, Aaron.....New York City.
Sanford, Merton Jarvis.....Center Lisle, N. Y.
Scharfman, Pauline.....Brooklyn, N. Y.
Schiff, Leo Francis.....Brooklyn, N. Y.
Schoonover, Clifford, A.B.....New York City.
Schwab, Leo.....New York City.
Schwartzman, Samuel.....New York City.
Seaman, Benjamin Franklin.....Matteawan, N. Y.
Searing, Benjamin Haff, A.B.....Glen Ridge, N. J.
Sears, Keith.....Searsburg, N. Y.
Shattuck, Hobart Parker.....Brooklyn, N. Y.
Sheitlis, Benjamin.....New York City.
Siegel, Abraham.....New York City.
Slavin, Michael.....Passaic, N. J.
Slavit, Joseph.....Brooklyn, N. Y.
Smith, John Van Wagner.....White Plains, N. Y.
Smith, Samuel Newell.....Providence, R. I.
Smith, Warren George.....Oneonta, N. Y.
Sophian, Abraham.....New York City.
Specht, William Henry, DD.S.....New York City.
Squires, Charles Anthony, A.B.....New York City.
Stanley, Grant, B.S.....Meriden, Conn.
Startz, Benjamin.....New York City.

Stechman, Frederick William.....New York City.
Stein, Herbert Edward.....New York City.
Steiner, Sydney.....Brooklyn, N. Y.
Stevens, Benjamin.....New York City.
Stiefel, Isaac.....New York City.
Stigner, Per.....New York City.
Strachstein, Abraham.....New York City.
Streep, Isaac.....New York City.
Takami, Tayohiko Campbell.....Kumamoto, Japan.
Thompson, Carrie Wilber, A.B.....Montgomery, N. Y.
Tietze, Samuel.....New York City.
Titus, Charles Israel.....Windsor, N. Y.
Tompkins, George Nelson.....Ossining, N. Y.
Topping, Claude Hamilton.....North Harpersfield, N. Y.
Tunison, Richard Guy, Ph.G.....New York City.
Ulrich, John Linck.....Brooklyn, N. Y.
Unger, Arthur Sidney.....New York City.
Van Mater, Henry Field.....Atlantic Highlands, N. J.
Vaughan, Ernest Masters.....Brooklyn, N. Y.
Vickers, Harry William.....Canajoharie, N. Y.
Vogt, Walter Eugene.....Brooklyn, N. Y.
Volk, Lester David.....Brooklyn, N. Y.
Wagner, Otto.....New York City.
Walker, Alfred Augustus.....Birmingham, Ala.
Wallach, William Isidore.....New York City.
Walsh, William Edward.....Marcellus, N. Y.
Wasch, Milton Goodman.....Brooklyn, N. Y.
Webbe, Robert St. Clare Stanley.....New York City.
Weber, Edward William.....Mt. Vernon, N. Y.
Webster, Charles Henry.....West Laurens, N. Y.
Weller, Aaron.....New York City.
White, Alfred Winfield.....Brooklyn, N. Y.
White, Zella Mildred.....Bedford, Pa.
Wicks, James Monroe.....Brooklyn, N. Y.
Wicksman, Samuel.....Brooklyn, N. Y.
Wilson, McLeod Campbell.....New York City.
Windecker, Frederick C.....Little Falls, N. Y.
Wright, Floyd Robins, A.B.....Ithaca, N. Y.
Wysong, Thomas Shirley.....Port Washington, N. Y.
Zeiner, Eugene Jerome, Ph.G.....Brooklyn, N. Y.
Ziporkes, Joseph.....New York City.
Ziporkes, William Jerome.....New York City.
Zucker, Morris, Ph.G.....New York City.
Zwetchkenbaum, Samuel.....New York City.

MATRICULANTS AT ITHACA.

Almgren, Ebba Elizabeth.....Stockholm, Sweden.
Andrews, Harry Isaac.....Ithaca, N. Y.
Arends, Katharine.....New York City.
Avery, Harry Bain.....West Taghkanic, N. Y.
Becker, Damas Brough.....West Berne, N. Y.
Bedford, Alletta Langdon.....Haddonfield, N. J.
Berry, Edgar Fanning.....Auburndale, Mass.
Blahd, Mose Emmet.....Cleveland, Ohio.
Blum, Charlotte.....New York City.
Board, Ben Curry.....Chester, N. Y.
Bunker, Charles Orville Waite, B.Sc.....Hebron, Neb.
Cahill, Francis Joseph.....Hoosick Falls, N. Y.
Caldwell, Isabel.....Brooklyn, N. Y.
Chace, Archibald Eastwood.....New York City.
Chapman, Milton.....Hartland, N. Y.
Chase, Arthur Lewis.....Rochester, N. Y.
Chase, Elma Dorothy.....Knapp Creek, N. Y.
Clark, Zella Maria, B.A.....Bay View, P. E. Is., Can.
Crawford, Mary Merritt.....Nyack, N. Y.
Crite, Oscar.....Shelby, N. C.
Crum, Edward Irvin.....Dayton, Ohio.
Cuddeback, Edgar Gordon.....Port Jervis, N. Y.
Cuyler, May.....New York City.
Davis, Elbert Rice.....Rushford, N. Y.
Dederer, Isaac Carleton.....New York City.
Drake, Bertrand Francis, B.S.....St. Louis, Mo.
Edson, Ray Arthur.....Crittenden, N. Y.
Elliott, Marion Winifred.....Ithaca, N. Y.
Fancher, Eliza A.....Albion, N. Y.
Fennell Matthias Franklin.....Elmira, N. Y.
Genung, Lewell T., A.B.....Binghamton, N. Y.
Glennan, Arthur Wyman.....Washington, D. C.
Goehle, Otto Louis, A.B.....Buffalo, N. Y.
Goodwin, Frank Perry.....Jamestown, N. Y.
Goodwin, Norman.....New York City.
Gow, Edward Cochran.....Schuylerville, N. Y.
Gregg, George Woodlief.....Batavia, Ohio.
Groesbeck, Harvey Paterson.....Hoosick Falls, N. Y.
Hammond, Robert Bertine.....South Millbrook, N. Y.
Harris, Mitchell.....Hornellsville, N. Y.
Hatfield, Hazel May.....Newark, N. J.
Hoobler, Bert Raymond, B.S.....Pinconning, Mich.
Hutton, Robert Leroy.....Ridgewood, N. J.
Johnson, Milton John.....Jamestown, N. Y.
Johnston, Oscar Perry, M.S., Ph.B.....Vancleve, Iowa.

Kaufhold, Frank.....Newark, N. J.
Keet, Ernest Ellsworth.....Saranac Lake, N. Y.
King, Walter Edwards, A.B.....Kinsman, Ohio.
Knapp, Ralph Waldo.....Waverly, N. Y
Koehler, Charles George, Jr.....Brooklyn, N. Y.
Laird, Ida Marie.....Auburn, N. Y.
Lantz, Eleanor.....Newark, N. Y.
Lasbury, Alma Louise.....Broad Brook, Conn.
Lindsey, Maude.....Lockport, N. Y.
Loeber, Edith.....New Orleans, La.
Longbothum, George Thornton.....Fort Salonga, N. Y.
McCorkle, Josephine Cassandra.....Evansville, Ind.
McKay, Florence Lucinda.....Ithaca, N. Y.
MacKellar, James Malcolm.....Nyack, N. Y.
Maher, William Elliott.....Brewster, N. Y.
Markey, Edward Bond.....Eaton, Ohio.
Martin, Arthur Harold.....Cooperstown, N. Y.
Mills, Minnie Mary.....Owego, N. Y.
Mount, Louis Burgh.....Troy, N. Y.
Murset, Charles William.....Port Jervis, N. Y.
Nusbaum, Jerome.....Newark, N. J.
Oberndorf, Clarence Paul.....New York City.
Parker, Esther Emily.....Matteawan, N. Y.
Patterson, Robert Rhoode.....Geneseo, N. Y.
Payne, Charles Rockwell, A.B.....Wadhams Mills, N. Y.
Perkins, Darwin Clara.....Alexander, N. Y.
Phillips, Earle W.....Savannah, N. Y.
Poate, Ernest Marsh.....Rushford, N. Y.
Price, Adelbert J.....Dundee, N. Y.
Prince, Howard Love.....Byron Center, N. Y.
Quinn, Patrick John.....Oswego, N. Y.
Ransom, Leigh Collins.....Dannemora, N. Y.
Ray, Anna Elizabeth, A.B., A.M.....New York City.
Richards, John Harold.....Whitehall, N. Y.
Richardson, Frank Howard.....Brooklyn, N. Y.
Robinson, Mary Huntting.....Ithaca, N. Y.
Robinson, Ralph.....Ithaca, N. Y.
Rockwood, Harry Langdon.....Olean, N. Y.
Rollins, Ethel.....New York City.
Santee, Harold Elmore.....Hornellsville, N. Y.
Scott, Mabel.....Newark, N. J.
Sheldon, William Hills.....Auburn, N. Y.
Sill, William Miller.....Jamestown, N. Y.
Smithe, Percy Allis Winans.....Ithaca, N. Y.
Snyder, William Clark.....Binghamton, N. Y.
Stark, George William.....Little Falls, N. Y.
Thro, William Crooks, B.S.A., A.M.....Ithaca, N. Y.
Tinkler, John, Jr.....Deposit, N. Y.
Todd, Leona Estella.....Rochester, N. Y.

Tousey, Thomas Grant.....Pittsford, N. Y.
Wake, Frederick Greene.....Auburn, N. Y.
Walker, Harry Abram.....New York City.
Wankel, George Canning.....Utica, N. Y.
Welles, Edward Murray.....Addison, N. Y.
Wescott, Adelaide May.....Knox Centre, Me.
Wilcox, Henry Hopson, Jr.....Potsdam, N. Y.
Wilcox, Roscoe Squires.....Bergen, N. Y.
Wilson, David.....Amsterdam, N. Y.
Winslow, Floyd Stone.....Henrietta, N. Y.
Wismar, William Frederick, A.B.....Salt Lake City, Utah.
Worts, Elizabeth Mannister.....New York City.
Wright, Arthur Mullen.....Lyndonville, N. Y.
Yost, George Irving.....Schuylerville, N. Y.
Zimmer, Wilson Briggs.....Gallupville, N. Y.

HOSPITAL APPOINTMENTS.

The percentage obtained in each class was as follows:

1899.....42%	1901.....61%
1900.....58%	1902.....71%

1899.

Bellevue Hospital,

Second Division.

Robert Burns Anderson,
Charles Edgerton Carter, A.B.,
George Waller Hawley, Ph.B.,
Nathan Jenks, B.S.,
William Joseph Jones,
John Metcalfe Polk, Ph.B.

New York Hospital.

Frederick Love Keays, A.B.

German Hospital.

Edward Adams.

Gouverneur Hospital.

David Simon Fleischhauer,
Agnew Hodge Hilsman.

Post-Graduate Hospital.

Edward Wadsworth Peterson.

Beth Israel Hospital.

Joel Grosner,
Jacob Heller,
William Levy.

English Hospital, Vellore, India.

Ida Sophia Scudder.

St. Vincent's Hospital.

William Davidson Farrell.

Fordham Hospital.

Edward Joseph Connell, A.B.

City Hospital.

Charles Paterno.

Elizabeth General Hospital.

Clerihew Rutan Treat.

New Jersey State Hospital.

Henry A. Cossitt.

German Hospital, Newark.

Ernest Tutschulte.

New England Hospital for Women and Children.

Ellen Emma Bartholomew,
Delia M. O'Connell, A.B.

1900.

Bellevue Hospital,

Fourth Division.

Newton Gurdon Evans,
James Treat Gorton, B.S.

Second Division.

Coryell Clark,
Edward Hand,
* Ralph Jones Hess, B.S.,
Michael Joseph Sullivan,
Gurdon Conde Buck, B.S.,
Henry John Fischer,
William Hereford Smith, B.S.

Presbyterian Hospital.

Joseph Storer Wheelwright, B.A.

New York Hospital.

Frank Clark Yeomans, A.B.

Gouverneur Hospital.

Joseph Elias Weinberg.

Fordham Hospital.

Joseph Augustus Mulholland, A.B.

City Hospital.

George Lincoln Bunnell, Ph.B.

St. Mark's Hospital.

Frederick G. E. Schmidt.

Beth Israel Hospital.

Julius Frankel.

Rochester City Hospital.

William Henry Sutherland.

Orange Memorial Hospital.

Francis Henry Glazebrook,
Henry Putnam Merrill.

German Hospital, Brooklyn, N. Y.

* Louis Mandel.

Babies' Hospital.

Emelyn L. Coolidge.

Methodist Episcopal Hospital, Philadelphia.

Frances Cohen, A.B.

New York Infirmary for Women and Children.

Helen Dennis,
Lilian K. P. Farrar,
Jane N. Baldwin.

Worcester Memorial Hospital.

Gertrude Ward.

New England Hospital for Women and Children.

Harriet D. W. Showers.

* Deceased.

1901.

Bellevue Hospital,

Second Division.

George Good,
John H. McLean, A.B., M.D.,
Mark L. Fleming,
Edward Francis Kilbane.

German Hospital.

Henry J. Gundacker, B.A.

Gouverneur Hospital.

Robert S. McDonald.

Fordham Hospital.

William Henry Cantle.

Montefiore Home.

John D. Hammil,
Albert A. Wohl.

New York Infirmary for Women and Children.

Mary Alice Asserson,
Caroline S. Finley,
Elizabeth H. Livingston,
Ethel Mayer, A.B.

New England Hospital for Women and Children.

Maude Glasgow,
Bella Lysaght.

Worcester Memorial Hospital.

Elizabeth Sweet.

1902.

Bellevue Hospital,

Fourth Division.

Robert S. McDonald, Ph.B.

Second Division.

Walter Lindsay Niles,
Paul Waterman, A.B.,
William Hailes Palmer,
Royden M. Vose,
Dean Miltimore, B.S.,
Willets Wilson,
Augustus Rosenbloom,
Mace Anderson Losee.

German Hospital.

Christian W. Janson.

St. Vincent's Hospital.

Amos Canfield.

Mt. Sinai Hospital.

Charles L. Stone.

Gouverneur Hospital.

Emily Dunning, B.S. (1901).

Elizabeth General Hospital.

Alvin R. Eaton.

Rochester City Hospital.
Willis E. Bowen.

Christ Hospital, Jersey City.
Henry E. Woelfle.

Brooklyn Hospital.
Edward Raymond Hildreth, A.B.

St. Joseph's Hospital, Providence.
Willis M. Stevenson.

Methodist Episcopal Hospital, Philadelphia.
Nan Gilbert Seymour, A.B.

Worcester Memorial Hospital.
Stella S. Bradford, A.B.,
Anna I. von Sholly, A.B.

New York Hospital.
Charles Melvin Mix, A.B.,
Victor Corse Thorne, Ph.B., LL.B.,
Benjamin S. Barringer, B.S.

St. Luke's Hospital.
Henry Isaacs Johnston,
Frank M. Dyer.

Post-Graduate Hospital.
Jason Samuel Parker.

Hudson Street Hospital.
William H. A. Warner.

Fordham Hospital.
James Valentine Kern.

Beth Israel Hospital.
David Sheitlis.

Smith Infirmary, Staten Island.
Cecil M. Ross.

St. Catherine's, Brooklyn.
Frederick L. Flynn,
Louis Schaefer.

St. John's Hospital, Yonkers.
Harvey L. Van Pelt.

St. Joseph's Hospital, Yonkers.
James S. Greene.

St. Mark's Hospital.
Julius L. Amster.

New York Infirmary for Women and Children.
Mary MacMillan, A.B.

Children's Hospital, San Francisco.
Mary F. D. Thornton.

COLLEGE BUILDING.

The Medical School and a Dispensary, each with a main entrance on First Avenue, are arranged as follows:

The basement is commodious, well lighted, and ventilated, and contains the engines, boilers, dynamos and ventilating machinery; the refrigerating and cold-storage plant, with the injecting and freezing rooms; a large room with lockers, and another for bicycles. Storerooms, including one for drugs; four rooms, including a small theatre and a workshop, for orthopædic surgery; toilet rooms and lavatories, and several rooms for the janitor of the building, are also found here. On the basement level, but outside of the building, is a large incinerating furnace for consuming all the refuse from the College.

The principal entrances to the building are on the *First Floor*. They open from First Avenue into vestibules, one leading to the main hall of the school, the other to the general waiting room of the dispensary, between which the large amphitheatre is situated.

The rooms of the Children's Department, which include an isolating room and a small theatre, are placed between the entrances, while around the waiting room of the dispensary are located the office for distributing patients, the pharmacy rooms for the departments of surgery and medicine, waiting and dressing rooms, lavatories, and rooms for the Roentgen-ray and sterilizing apparatus.

Grouped around the main hall of the school on this floor are the council and faculty room, the office of the Dean, the secretary, and the clerk, a reading and recitation rooms.

Upon the *Second Floor*, the same general arrangement prevails. On the side of the dispensary there is a large waiting room, surrounded by rooms assigned respectively to the departments of genito-urinary diseases, diseases of the nervous system, of the skin, and of the ear, while covering the space at the middle front of the building are the rooms belonging to the departments of the eye and the throat, with a series of twenty dark stalls for the simultaneous examination of as many patients by as many students. Small waiting and dressing rooms and lavatories for the convenience of the patients are also found on this floor. The upper part of the large amphitheatre, extending from the floor below, occupies the centre of the rear half of this floor. The remainder of the floor is given up to the school. Here is found a hall, around which are grouped recitation rooms and laboratories for clinical pathology. These laboratories have convenient access from the dispensary, permitting ready coöperation in the work carried on there.

The *Third Floor* of the building is given up to teaching space, except-

ing an area upon the "dispensary side" of the building, which is assigned to the departments of gynæcology and obstetrics. This comprises a small theatre, examining, waiting, dressing, and toilet rooms, manikin, and two recitation rooms. The remainder of this floor is occupied by two amphitheatres (each having a seating capacity of about 175 students); one for anatomy, physiology, and pathology, the other for chemistry; attached to each are preparation and research rooms. The chemical laboratories also occupy this floor, including the main laboratory, the laboratory for physiological chemistry, rooms for apparatus, etc., and a library of chemistry.

There is the usual hall and corridor space with toilet rooms and lavatories.

The *Fourth Floor* is occupied by the upper part of the two amphitheatres which project from the floor below. The department of pathology and bacteriology occupies the remainder of this floor. Ample facilities are provided, not only for the class work and demonstrations, but for special and advanced courses and investigations. A library of pathology and bacteriology is situated here.

The *Fifth Floor* is devoted to the department of practical anatomy. The main dissecting room occupies a space of 160 by 55 feet; there is also a large room, 40 by 50 feet, which is set apart for advanced undergraduates and post-graduates. These rooms can be cooled by the refrigerating plant in such a manner as to permit the pursuit of practical anatomy with as much comfort in summer as in winter.

This floor presents such facilities as lockers for 300 students, a small demonstration theatre with prosecting and cold-storage room attached, private dissecting rooms, a bone room, a library, a reading and study room, and a commodious room for instruction in operative surgery.

The department of photography, the animal house, and a room for the preparation of bones are placed in a half-story at the top and rear of the building.

There are two main staircases, one for each department of the building, passenger elevators, and a freight lift.

The building itself is fireproof throughout, being constructed of steel, stone, brick, marble, and tile. The glazed brick and glazed tile walls, tile floors, and enamel painted cast-iron trim to the doors and interior of the windows insure cleanliness. Special attention has also been paid to the problems of refrigeration, lighting, heating, and ventilation, so that every part of the structure can be easily kept at all times in an agreeable and sanitary condition.

In conjunction with this building the Loomis Laboratory will be employed in the manner already set forth.

CORNELL UNIVERSITY

COMPRISES THE FOLLOWING DEPARTMENTS

The GRADUATE DEPARTMENT (Degrees A. M., Ph. D., etc.)

The ACADEMIC DEPARTMENT, OR DEPARTMENT OF ARTS AND SCIENCES (Degree A. B.)

The COLLEGE OF LAW (Degree LL. B.)

The MEDICAL COLLEGE* (Degree M. D.)

The NEW YORK STATE VETERINARY COLLEGE (Degree D. V. M.)

The COLLEGE OF AGRICULTURE (Degree B. S. A.)

The NEW YORK STATE COLLEGE OF FORESTRY (Degree B. S. F.)

The COLLEGE OF ARCHITECTURE (Degree B. Arch.)

The COLLEGE OF CIVIL ENGINEERING (Degree C. E.)

The SIBLEY COLLEGE OF MECHANICAL ENGINEERING AND MECHANICAL ARTS (Degree M. E.)

For copies of the University Register and for additional information, apply to

REGISTRAR, CORNELL UNIVERSITY,
Ithaca, N. Y.

*The full four-year course of the CORNELL UNIVERSITY MEDICAL COLLEGE is given in the City of New York, but the first half of it—the work of the first and second years—is also given at Ithaca, where it may be taken by men students and where alone it can be taken by women students (for whom a home is provided in the Sage College for Women). Both men and women students must take the last two years of the course in New York City. Special announcements of the Medical College and information of every kind regarding it will be furnished on application to

SECRETARY, Cornell University Medical College,
First Avenue and 28th Street, New York City.

Press of J. J. Little & Co., Astor Place, New York

REPORT OF THE COMMITTEE

ON THE

METHOD OF TRANSFERRING STUDENTS

BETWEEN THE TWO DIVISIONS OF THE

CORNELL UNIVERSITY MEDICAL COLLEGE

REPORT OF THE COMMITTEE

By appointment the committee met at the medical college building in New York City, June 26th, 1900, for a conference with representatives of the New York Faculty. There were present at this conference the Dean of the Cornell University Medical College, Dr. Wm. M. Polk, the secretary of the faculty, Dr. John Rogers, Jr., and all the members of the committee from Ithaca,—Dr. E. L. Nichols, Dr. P. A. Fish, and Professor S. H. Gage.

While the resolution of the faculty at Ithaca asked that a committee be appointed to confer as to the method of acceptance in New York of the students who had completed the first two years in medicine at Ithaca, and the President of the University had appointed the committee for that specific purpose, there naturally arose at the conference a consideration of the more general questions relating to the transfer of students between the two divisions of the College, and the regulations governing the admission to classes and the advancement of the student from class to class.

The following were the main points considered :

1. It was the unanimous opinion of the conference that a student could not migrate or be transferred from one division of the Medical College to the other except under the following conditions :

The student must obtain from the faculty under which he is registered a statement of all the work which he has done under that faculty ; and accompanying this statement must be a recommendation that the student be allowed to register in the other division. This statement and recommendation should be signed by the secretary of the faculty issuing the statement and recommendation.

2. As the final determination of the student's standing and fitness for graduation must be determined by the faculty in New York City, and naturally the main transfer will be

from Ithaca to New York, it seemed desirable and proper that the marking of the student transferred from one division of the college to the other should be according to the system employed in New York. That is a single mark for a course if one year or less in length, and a mark for each year's work in a subject extending over more than one year, as anatomy and physiology.

3. While there seemed no great objection to the migration of students between the two divisions during the first two years, it was unanimously agreed that such migration was very undesirable except at the completion of a full college year. Apart from any pedagogical objections there is the very practical objection that the courses differ somewhat in the two divisions, and it would be difficult to properly adjust the students in the middle of a subject.

4. It was agreed that during the first two years the advancement in class and the general regulation of students might properly be independent in the two divisions of the college.

From the close inter-relation of the medical faculty at Ithaca with the other university faculties there, it seemed wise for the Ithaca division to conform as nearly as possible to the regulations governing the other university faculties in Ithaca.

Furthermore, as many of the students at Ithaca are working for a degree in arts and sciences as well as in medicine, it seemed impracticable to adopt the regulation in force in New York (see pp. 34, 79, 80 of the announcement for 1900–1901) debarring a student from taking any work in an advanced class who had not wholly completed the work of the previous year.

5. In accordance with the statutes of the Trustees in establishing and defining the duties of the various faculties and colleges, it was the unanimous opinion of all the members present at the conference that whenever students are transferred from one division of the medical college to the other, that they are wholly under the jurisdiction of the division to which they have been transferred, the same as the other students of that division. This would not permit a student to enter a different class or year simply because he had been

transferred from the other division, when otherwise he would be ineligible.

6. It was agreed that the requirements of the law relating to the Regents Medical Students Certificates should be looked after by the division in which the student registers for the first year's work, and that in the statement of the standing of a student who is transferred shall be given the number of his medical students certificate, and, when possible, the date when it was issued.

7. With reference to the specific question before the committee, viz., the method of accrediting students who had finished the first two years of medicine in Ithaca, it was agreed, as given in the first comprehensive regulation (see above) that each student should be furnished an official statement of his standing, signed by the secretary of the faculty at Ithaca. It was further agreed that in case of deficiencies, the rules of the New York division be followed, and that before advancing from the second to the third year class the deficiencies must be made up, and that no studies shall be taken in an advanced class while such deficiencies are being removed. For removing the deficiencies, examinations are held at the beginning of the fall term, both in Ithaca and in New York City. The student is at liberty to take these examinations in Ithaca or in New York City. The examination on a subject in either place is final for that year. That is the student would not be permitted to try an examination in a subject in Ithaca, and take advantage of the later date for the examination in New York to have a second examination in the same subject the same autumn.

If a student is deficient in two or more subjects there is no objection to his taking the examination in one or more subjects in Ithaca and the remaining ones in New York City the same autumn.

After this conference the committee, under the authority of the President of the University, proceeded to carry out the method of transfer agreed upon, and each student who had been two years in the medical school at Ithaca was furnished

with an official statement of his standing, and whether or not his first two years were complete. The circular letter given in the note below* was sent with this statement to each student, so that in case of deficiencies he would know when they could be removed.

As the students who had just finished the two years in Ithaca were ignorant of the fact that the regulations for advancement in class were different in New York from those in Ithaca, and as the regulation is new, having been first published in the announcement for 1900–1901, pp. 34, 79, 80, it seemed to the committee that it would be proper to administer the rule with some leniency, and satisfactory arrangements were made with the New York division to receive a few students with slight deficiencies.

The regulation for the advancement of students from the second to the third year class meets the most hearty approval of the committee, and in future, now that the students have full information, the committee advises the strictest adherence to the rule.

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* ITHACA, N. Y., JULY 10, 1900.

To the Students of the Cornell University Medical College, Ithaca Division:

You will find enclosed an official statement of the work done by you in Medicine at Ithaca. This statement will differ somewhat from your term cards, as the massing of subjects and the method of marking has been modified to make the statement conform to the method used in New York City.

If your work during the two years in Ithaca is complete, it will simply be necessary for you to present the statement in New York when you will be registered without further trouble in the third year class.

If you have any deficiencies it will be necessary to make them up before you can be registered in the third year class. A student with deficiencies is not allowed to register in the third year class, and he is not allowed to take any studies of the third year.

For those having deficiencies opportunity will be given at Ithaca and in New York City to make up the deficiencies. The dates are enclosed if you have deficiencies. The student can elect whether to take the examinations in Ithaca or New York. The examinations in either place are final. If the student fails he loses a year, and while making up deficiencies he cannot take up any of the work of the third year.

Yours,

S. H. GAGE,
E. L. NICHOLS,
P. A. FISH,
Committee.

In making out the standing of the students some little difficulty was experienced. In the first place because several marks are given in a subject and in a year, and but a single mark was desired. In the second place the passing mark in New York conforms with the mark of the Regents, that is 75, while the passing mark in Ithaca is 60. As a working basis it was assumed that the amount of knowledge required in each case to obtain a passing mark was the same, and as the New York scale was selected as the standard it became necessary to reduce the Ithaca scale to the New York scale.

For obtaining the single mark for a subject or year in the Ithaca scale, all the marks of a subject, or a year's work, were added and an average taken. In reducing the Ithaca to the New York scale the committee was deprived of the help of its most expert member, Professor Nichols of the department of Physics. The remaining members employed a method, which was carefully examined by Professor Tanner of the Mathematical faculty and pronounced by him the fairest practicable way of equalizing the marks.

Briefly described the method is the arithmetical one of reducing one scale to another. It was also worked out graphically, following the geometrical principle of determining the ratio of the bases of similar triangles, which gave exactly the same results as the arithmetical method. The following table was obtained by the above method and used in all the determinations :

TABLE FOR REDUCING THE ITHACA TO THE NEW YORK SCALE

Ithaca Marks.		N. Y. Marks.	Ithaca Marks.		N. Y. Marks.
60–61	=	75	83–84–85	=	90
62–63	=	76	86–87	=	92
64–65	=	78	88–89	=	93
66–67	=	79	90–91	=	94
68–69	=	80	92–93	=	95
70–71	=	81	94	=	96
72–73	=	83	95–96	=	97
74–75	=	84	97–98	=	98
76–77	=	86	99	=	99
78–79–80	=	87	100	=	100
81–82	=	89			

As noted above, a statement giving the marks on the New York scale was sent to each student who had been two years in the medical course at Ithaca. A duplicate statement for each student was supplied to the secretary of the New York faculty, Dr. Rogers. A third duplicate was filed with the official card from the Registrar's office. On this third duplicate were given the marks on the Ithaca as well as on the New York scale.

While the carrying out of the regulations agreed upon in the conference involved no little labor, the committee, in making their report, feel gratified that so cordial and satisfactory an arrangement could be made with their colleagues in New York, and feel that this arrangement between the two divisions of the medical college will be to their mutual advantage.

Respectfully submitted, Sept. 29 and Oct. 1, 1900.

SIMON H. GAGE,
EDWARD L. NICHOLS,
PIERRE A. FISH.